POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

Department of Economics
College of Social Sciences and Development
Sta. Mesa, Manila City

ECON 361

Economics of Labor and Human Resources

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Economics of Labor and Human Resources

ECON 361

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The VMPGO

VISION

PUP: The National Polytechnic University

MISSION

Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities through a re-engineered polytechnic university by committing to:

- provide democratized access to educational opportunities for the holistic development of individuals with global perspective.
- offer industry-oriented curricula that produce highly-skilled professionals with managerial and technical capabilities and a strong sense of public service for nation-building.
- embed a culture of research and innovation.
- continuously develop faculty and employees with the highest level of professionalism.
- engage public and private institutions and other stakeholders for the attainment of social development goal.
- establish a strong presence and impact in the international academic community.

PHILOSOPHY

As a state university, the Polytechnic University of the Philippines believes that:

- Education is an instrument for the development of the citizenry and for the enhancement of nation-building; and,
- That meaningful growth and transformation of the country are best achieved in an atmosphere of brotherhood, peace, freedom, justice and nationalist-oriented education imbued with the spirit of humanist internationalism.

SHARED VALUES AND PRINCIPLES

1. Integrity and Accountability
2. Nationalism
3. Sense of Service
4. Passion for Learning and Innovation
5. Inclusivity
6. Respect for Human Rights and the Environment
7. Excellence
8. Democracy

GOALS OF THE COLLEGE/CAMPUS

The PUP College of Social Sciences and Development (CSSD) shall become one of the leading colleges on social sciences and development in the country. To realize its vision, the College of Social Sciences and Development shall pursue the following goals:

- Foster humanism, nationalism, and the preservation of cultural heritage.
- Optimize academic excellence through the cultivation of the trifocal functions of the academe: instruction, research, and extension;
- Cultivate a sense of proactive involvement toward a nation-building and the preservation of democratic processes;
- Utilize the social sciences in capacitating and engaging various stakeholders to address societal problems and attain social development;
- Sustain disciplinal integrity while pursuing interdisciplinary and multidisciplinary approaches in the social sciences and development;
- Establish linkages with stakeholders such as academic institutions, professional organizations, government and non-government organizations, the private sector, and alumni for the improvement of the academic programs and services to the college; and,
- Develop leadership and innovative skills among the faculty members and students in meeting the challenges that confront the various sectors of Filipino societies;

PROGRAM DESCRIPTION

Technological changes in modern economies are tremendously affecting individuals, firms, government and international institutions. Competitiveness and connectivity in the global economy can only be attained by students and professionals through a joint effort by stakeholders especially the academe and the industry. Moreover, pursuant to the international standards of higher education qualification adopted in the Bologna Accord, there is a need to increase the content of the existing curriculum from the current 150 credits to the minimum of 180 credits for the Bachelor's degree. This new curriculum is considered to produce a new breed of professionals who are knowledge-equipped and skills-enhanced.

The Bachelor of Science in Economics is an undergraduate program offered to students who are cognizant of the importance and significance of theories and empirics of the decision-making process of economic agents such as firms, individuals, government and non-governmental organizations in relation to efficient utilization of scarce resources. The program strikes a balance between classroom- and research-based activities in understanding the perplexities of economic trends and issues anchored on contemporary economics employing modern technologies.

COURSE DESCRIPTION

This course explores the functioning of the labor market, emphasizing the actions of profit-driven firms and utility-seeking workers, and how their interactions shape the equilibrium between labor supply and demand. Additional topics include education and training as investments, worker migration and job turnover, as well as issues related to inequality and gender within the labor market.

INSTITUTIONAL LEARNING OUTCOMES (ILOS)

As a polytechnic state university, PUP shall develop its students to possess:

1. **Critical and Creative Thinking.** Graduates use their rational and reflective thinking as well as innovative abilities to life situations in order to push boundaries, realize possibilities, and deepen their interdisciplinary, multidisciplinary, and/or transdisciplinary understanding of the world.

2. **Effective Communication.** Graduates apply the four macro skills in communication (reading, writing, listening, and speaking), through conventional and digital means, and are able to use these skills in solving problems, making decisions, and articulating thoughts when engaging with people in various circumstances.

3. **Strong Service Orientation.** Graduates exemplify strong commitment to service excellence for the people, the clientele, industry and other sectors.

4. **Adept and Responsible Use or Development of Technology.** Graduates demonstrate optimized and responsible use of state-of-the-art technologies of their profession. They possess digital learning abilities, including technical, numerical, and/or techno-preneurial skills.

5. **Passion for Lifelong Learning.** Graduates perform and function in society by taking responsibility in their quest for further improvement through lifelong learning.

6. **Leadership and Organizational Skills.** Graduates assume leadership roles and become leading professionals in their respective disciplines by equipping them with appropriate organizational skills.

7. **Personal and Professional Ethics.** Graduates manifest integrity and adherence to moral and ethical principles in their personal and professional circumstances.

8. **Resilience and Agility.** Graduates demonstrate flexibility and the growth mindset to adapt and thrive in the volatile, uncertain, complex and ambiguous (VUCA) environment.

9. **National and Global Responsiveness.** Graduates exhibit a deep sense of nationalism as it complements the need to live as part of the global community where diversity is respected. They promote and fulfill various advocacies for human and social development.

PROGRAM LEARNING OUTCOMES (PLOS)

1. Demonstrate theoretical knowledge in economics and standard methods used in economic research, policy, plan, and program formulation.
2. Effectively communicate socio-economic arguments and research results in local, national, and international venues.
3. Show willingness to provide the possible best service by proactively engaging with industry/government institutions' present and future needs.
4. Establish the ability to diagnose economic problems using appropriate theories and methodologies.
5. Demonstrate hunger for more learning to be on top of their field or chosen specialization in economics, whether academically or in industry.
6. Exhibit strong leadership qualities in practical applications of essential research and analytical skills to effectively tackle real-world organizational challenges.
7. Demonstrate a deep commitment to high ethical standards especially in constituting, analyzing, and interpreting relevant economic data and findings.
8. Demonstrate readiness for various roles and responsibilities to keep up with new challenges brought about by the incredibly fast pace changing economic environment.
9. Demonstrate social and environmental concerns and inculcate responsible citizenship.

COURSE LEARNING OUTCOMES (CLOS).

1. To demonstrate understanding and awareness on the VMGO.
2. Understand the fundamental concepts and principles of labor economics and human resources.
3. Explain optimization process behind labor supply and demand and analyze labor market equilibrium.
4. Discuss different theories about the role of human capital in labor markets
5. Understand and analyze the effects of minimum wages on labor market outcomes
6. Demonstrate critical thinking in analyzing economic phenomena and economic logic

Preface

This instructional material entitled, “ECON 361: Economics of Labor and Human Resources” is divided into three (3) major lessons: (1) Introduction to Labor Economics; (2) Wage Determination and Resource Allocation; and (3) Government, Government Legislations and the Labor Market.

This instructional material also consists of 10 exercises that will allow students to practice and test their knowledge and understanding on various topics, and the instructors to assess and evaluate students’ performance. Finally, it also consists of other information relevant to this course such as the course and learning objectives, VMGO of the University, Grading System, and the Rubrics for different activities.

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COURSE SYLLABUS

Note that the course syllabus will be distributed on a separate file during the class orientation.

UNIT I

Lesson 1

INTRODUCTION TO LABOR ECONOMICS

INTRODUCTION

Labor represents the human factor in producing the goods and services of an economy. The quantity and quality of labor that individuals supply is an important factor in determining the economy's level of production and rate of growth. It is the exertion by human beings of physical or mental efforts, or both, towards the production of goods and services. (Poquiz, 2012).

As provided under the Sec. 18, Art. II, 1987 Constitution, "the State affirms labor as a primary social economic force. It shall protect the rights of workers and promote their welfare." Recognizing the basic fact that human labor is not merely an article of commerce or a factor of production to be similarly treated as land, tools, or machinery. Further, employer stands on higher footing than the employee due to the fact that there is greater supply than demand for labor, and the need for employment by labor comes from vital and even desperate necessity.

How we do in the labor market helps determine our wealth and the types of goods we can afford to consume. Labor economics is the study of the workings and outcomes of the market for labor. It is concern at how individuals and economic entities look at work and pay in the labor market; the behavior of employees and employers and their response to incentives in regards to wages, prices and profit; and the policies affecting labor markets from the imposition of minimum wage to government mandate of health insurances. And with the diverse list of questions which illustrates why the study of labor markets is important, we are more eager to eager to learn how the labor market works. As we move along with these instructional materials we will encounter the different actors in the labor market- workers, firms, and the government.

LEARNING OBJECTIVES

1. Define Labor Economics
2. Critique the viewpoints and approaches in the study of Labor Economics
3. Explain the scope of Labor Economics
4. Analyze the pay-offs
5. Explain the concepts in Labor Economics

PRESENTATION/DISCUSSION OF THE LESSON

Prevailing Theories

U.S. gov agency

Until the Great Depression and World War II, the study of labor economics was confined in a dominant, orthodox framework of pure neoclassical economic theory. Analytical concepts familiar to micro and macroeconomists were the guiding precepts. The fundamental theoretical conclusion emerged in a labor market where the competitive forces of supply and demand operated, and a uniform industry-wide wage would prevail for laborers with the same skill or occupational characteristics. Any aberrations were thought to be short-lived and generally dismissed. This established theory was remained unquestioned until the War Labor Board yielded opposite conclusions in its comprehensive empirical research project. The research found that wage rates for similar occupations varied considerably within and across many of the same labor markets. The most ironic finding of the report involved unions. According to established theory, in unionized labor markets, the forces of free competition were thought to be least active, which represented the antithesis of neoclassical free competition. The study showed that, in reality, it was only in these unionized markets that anything approaching a uniform industry wage prevailed. Postwar labor economics developed into two schools of thought - the orthodox neoclassical school and the institutionalist school. The orthodox neoclassical school continued to push ahead with theoretical models, while the institutionalist school conducted empirical research whose results typically clashed with the overall conclusions reached by theorists. The following sections will look into the history of the theoretical movement and the critical institutionalist beliefs.

History of the Theoretical School

As a separate branch of economics, labor economics emerged out of the political turmoil swirling around two major theoretical traditions and their competing theories of wage determination. On one side stood classical political economy, on the other neoclassical or marginalist political economy. The answers to two key questions divide the two traditions. First, do capitalist market forces function to guarantee that workers will receive their "fair share" of the output they generate? Second, if not, is it possible through collective/union efforts to gain a larger share, given the constraints imposed by capitalist market forces?

From the 18th century until the middle of the 19th, the Classical political economy developed and influenced the field of economic theory and analysis. It would have answered no to the first question, while it would answer yes to the second under certain conditions. The field found its most cogent expression in Adam Smith's (1723-1790) *Wealth of Nations* in 1776, which was popularly demarcated as the founding work of modern political economy. The tradition extended through other significant figures such as David Ricardo (1772-1823) and Karl Marx (1818-83); these three brought the field to its highest development. In his labor theory of value and exploitation, Marx demonstrates how workers received only a portion of their product, with the remainder

forming an economic surplus appropriated by capitalists to maintain their consumption and investment activities.

The neoclassical theory displaced classical political economy in the 1870s, and that remained the dominant framework for conducting formal economic analysis. The works of Jeremy Bentham (1748-1832), a utilitarian social philosopher, were highly influential in forming early neoclassical economics. Bentham maintained that all human motivation could be reduced to a single principle: the individual's desire to maximize utility or satisfaction. Contrary to the class-conflict conclusions reached by classical political economy, **utilitarianism** espoused an economic doctrine of class harmony where the satisfaction of individual preferences informed all economic decisions. The appeal to class harmony resided in the "rational" notion that social justice would prevail if only the capitalists and workers were brought to understand that they each received only a portion of what they had jointly created. However, several early attempts at constructing an economic theory of value and exchange based on a utilitarian approach failed. With the separate publication of economic texts by William Stanley Jevons (1835-82) and Carl Menger in 1871, Leon Walras, the neoclassical theory emerged as an internally coherent theoretical tradition three years later. Later, the work of Alfred Marshall (1842-1924) has provided additional support of the neoclassical theory.

Neoclassical wage theory developed in response to Marx's critique and in reaction to a burgeoning, often hostile, trade union movement. Its concern was to affirm that capitalist market forces could pay workers their "rightful share" of the net product. John Bates Clark's influential book, *The Distribution of Wealth,* did just that, with that in mind. In his book, Clark contends that workers received wages equivalent to the value of their marginal labor product. It followed that wage differentials reflected individual differences in skill and ability and the nonmonetary advantages and disadvantages between numerous jobs. Any of the factors that caused labor productivity to increase, thus shifting the demand curve for labor upwards, would be met with appropriate wage increases. ~~Clark and other neoclassical labor economists concluded that Marx was wrong and that unions were unnecessary~~. They argued that successful union strategies that raised wages above the value of their marginal product would have a negative effect by lowering employment within unionized sectors while increasing the labor supply and lowering wages in non-union sectors.

By the mid-1940s, neoclassical economists felt secure within their long-run equilibrium interpretation of wage determinants. However, empirical economists encountered unsettling data in attempting to reconcile real-life labor market phenomena with neoclassical theory. When confronted by a growing number of studies suggesting flaws in their theories, the neoclassical economists reacted by developing several ad hoc explanations to account for these exceptions. On the other hand, empirical economists found themselves shunning theoretical models constructed to guide them in their research. Without any theoretical structure to inform their work, they also resorted to ad hoc explanations. As a result, a growing schism emerged within labor economics between theory and practice.

Institutionalist Labor Economists

A new breed of "Institutionalist" labor economists arose at the end of World War II to address the widening gulf between theory and reality. Recognition of four major economic developments essentially explained why this happened. First, is the disturbing impact of the Great Depression that rattled every branch of economics related to the theories of pure competition and general equilibrium. Second, is the publication of John Maynard Keynes's (1883-1946) *General Theory* and its perceptive analysis of effective demand which posed intriguing questions that were difficult to reconcile with standard neoclassical theory. Third, the industrial unions were being formed at an unprecedented pace. Fourth, is the development of the theory of imperfect competition in the 1930s which seemed better suited to account for the fact that labor and capital markets reflected a very large powerful bargaining units that were fewer in number, as opposed to the very large number of small powerless markets assumed by the neoclassical theory of perfect competition.

John Dunlop was one of the earliest postwar institutionalists who attempts to explain inter-industry wage differentials based on real economic conditions. In 1948, he proposed four reasons for their existence: the unequal productivity levels, the proportion of labor to total costs; the relative degree or absence of competitive product market pressures; and an industry's changing skill and occupational composition of the workforce. Similar institutionalist studies soon followed. Though their points of emphasis varied, all those studies significantly departed from the prevailing neoclassical theory of perfect competition tied to marginal productivity.

John Commons known as the father of Institutionalism posits that economic activities take place within the institution (markets, firms and families), each institutions uses working rules to regulate and structure production and exchange by defining property rights that in turn determine the ownership of resources and permissible use of this resources. He defines that the basic unit of institutional economics as transaction which refers to legal transfer of ownership. Transaction comes in three forms. Bargaining is the voluntary transfer of property rights through market exchange. Rationing refers to the transfer of ownership rights of resources through a command of a superior. Lastly, managerial is the transfer through management methods of labor power purchased or owned by the firms but are residing in the worker- temporary ownership.

Institutionalist theory on methodological grounds was criticized by the upholders of neoclassical orthodoxy. They claimed that the Institutionalist theory, was overly dependent on short- as opposed to long-run determinations. Institutionalists replied that orthodox neoclassical theory had yet to explain the widespread and persistent inter-industry wage differentials between workers with nearly identical productivity characteristics, an undeniable fact uncovered repeatedly by institutionalist research.
The neoclassical theory appeared to be vindicated with the publication in 1964 of Gary Becker's book on human capital theory. Becker's human capital approach, for which he was awarded a Nobel Prize in economics in 1993, argued that workers could upgrade

their economic status if they made the rational individual choice to invest in more education and skill training. Once completed, their marginal productivity would increase, and competitive pressures within the labor market would operate to raise their income. If they chose to do otherwise, it signaled that they somehow preferred the existing distribution of wages and were willing to live with its consequences, no matter how inequitable. Armed with human capital theory, confident neoclassical labor economists entered the realm of empirical research to explain the persistence of inter-and intra-industry differentials among workers with identical productive characteristics.

They anticipated the restoration of marginal productivity theory to its former prominence, arguing that wage differentials reflected individual differences in skill and effort, hence productivity. Liberal economists also jumped on the bandwagon, viewing human capital theory as a means for justifying larger government expenditures on training programs for the poor and disadvantaged.

Real problems revealed its promises to be empty, not long after the rise of human capital theory. Despite the human-capital-inspired government programs, the continued fragmentation of the economy into low- and high-wage sectors proved intractable, as did wage differentials between black and white and male and female workers. According to the human capital theory logic, the economy's competitive pressures should have operated to eliminate those discriminatory forces. Yet, with time, they had grown more pronounced. Closer empirical scrutiny of human capital theory raised serious questions concerning the average years of schooling as the critical variable used to explain wage differentials. Other factors include large-scale manufacturing, on-the-job training, and reliance upon studies that separated production from skilled workers which offered more credible explanations.

The early 1970s saw another institutionalist theoretical upsurge intended to explain the persistence of race and gender wage discrimination and the growth of a newly emergent "working poor" category. Reviving and building upon a previous institutionalist concept of internal labor markets (ILMS), two "new institutionalist" labor economists, Peter Doeringer and Michael Piore (1942), led the effort to tackle those issues. They emphasized two major theoretical issues pertinent to ILMS theory: the growth of job-specific skill training and the notion of a modern "dual economy." In support of their job-specific skill approach, they argued that the development of large manufacturing firms provided the impetus for stable internal labor markets. So structured, firms could minimize the rising costs associated with skill training and worker turnover. Being somewhat sheltered from competitive external labor market pressures, firms could develop mutually beneficial internal job ladders. These would allow experienced workers to reap seniority benefits, be more inclined to stay within the firm, and train new workers.

Advancing a more detailed version of the dual economy approach first put forward by Robert Averits in 1968, Piore and Doeringer argued that the labor market was divided into a primary and secondary market. Jobs in primary markets were distinguished by sophisticated technologies, skilled and semi-skilled labor, high wages,

good working conditions, chances for advancement, employment stability, fairness, and due process in the administration of work rules, while on the other hand, jobs in the secondary markets were subject to external competitive pressures; lacked technological sophistication; were performed by unskilled labor; and featured low wages, little or no fringe benefits, high labor turnover, absenteeism and tardiness, higher levels of petty theft, little chance of advancement, and typically autocratic and capricious supervisors.

Proponents of ILMS argued that dual labor markets, especially its primary component, did not fit well within the orthodox model of pure competition determining wages. The idea that labor mobility would reduce wage differentials was flawed, if not altogether wrong, because of the discriminatory barriers that faced blacks, other ethnic minorities, and women. When it came to unions, however, Piore and Doeringer's ILMS model encountered difficulty in explaining how supposedly secondary labor markets could transform themselves into primary markets through unionizing efforts. Like older institutionalist labor economists, nor were they ever able to ultimately reject the overriding authority of marginal productivity theory.

In the more liberal academic environment of the 1970s, radical and Marxian ideas began to spread in labor economics. Drawing upon a rich historical legacy of the industrial organization under capitalism, Harry Braverman's groundbreaking 1974 publication, *Labor and Monopoly Capital,* painstakingly detailed the de-skilling effects of modern capitalism. Consistent with Karl Marx, Braverman argued that this course was undertaken so that capitalist-inspired management could take control of the labor process away from skilled workers to raise the level of exploitation. Influenced by Braverman, many radicals took issue with the assumed connection between highly capital-intensive modem technology and the high skill levels found in the high-wage primary labor markets, which was a primary part of the dual labor market theory. While, others rejected the harmonious view of the labor process held by the new institutionalist school, especially when frequent strikes and productivity slowdowns indicated a lack of harmony. Most radical labor market theorists did not entirely reject new institutionalist reasoning. Instead, they insisted that dual market structures arose from the class struggle over the internal organization of the labor processes which was called labor segmentation theory.

Though essentially restatements of imperfect competition theories from the 1930s, the new Marxist and radical versions of monopoly capital were advanced to explain how market power served to prop up longstanding, above-average profit rates. These rates were considered to be the sustaining lifeblood separating high-wage, primary markets from low-wage secondary markets. Interestingly, while reviving the importance of class struggle (once the centerpiece of classical political economy), many radicals were either ignorant of or rejected outright Marx's theory of the law of value. Marx considered this law as absolutely critical—it held the key to understanding the objective limits of a theory of inter and intra-industry profit and wage differentials tied to his dynamic theory of capitalist accumulation. With the lone exception of Howard Botwinick's contribution, *Persistent Inequalities,* no radical or Marxian work in labor economics has systematically broken away from the underpinnings of neoclassical

theory, in either its perfect or imperfect versions, to formulate a theory of wage differentials consistent with Marx's law of value.

Leftist criticisms of radical segmentation theory were several. On theoretical grounds, it was argued that segmentation theory was overly dependent upon ad hoc explanations and lacked theoretical clarity. Even results from empirical studies were contradictory, indicating that overall patterns of working-class division and segmentation were broadly diffused, tending to transcend neatly compartmentalized boundaries. This was true not only for the United States but also in Europe, where significant numbers of immigrants gained entrance into primary labor markets in Germany, France, and Italy instead of entering the secondary markets as segmentation theory would have expected. Moreover, when it came to the historical development of dual economic structures, more attention was paid to capitalists' motivations than to workers, especially unionized ones.

Beginning in the late 1970s, primary sector industries such as the automobile and steel industries suffered huge losses and went through periods of labor upheaval. In response to falling profit rates, which were once virtually guaranteed by near-monopoly power, former primary market high-wage firms were behaving much like secondary ones. Tactics included forcing concessions in wage and working conditions, threatening to or relocating firms to low-wage areas, defeating strikes through the use of "scab" labor as permanent striker replacements, actively lobbying for passage of trade pacts that threatened high wages, and instituting two-tier wage packages for the same job. Many radical labor economists unceremoniously abandoned ship after being faced with these difficulties and criticisms. Indeed, by the 1990s, many leading radical proponents were no longer touting class struggle as a determinant factor. Instead, they joined forces with the orthodox consensus on the need for joint labor-management schemes designed to counter the slowdown in productivity.

Scope of Labor Economics

The scope of labor economics covers those fields of state activity where labor is directly or indirectly involved. It is a systematic study of various theories, concepts, hypotheses, and steps relating to the labor class. Labor economics deals with various aspects such as labor organization, collective bargaining, wages and employment theory, manpower economics. The workers are primarily concerned with the security of employment, which depends on the well-being of the entire working class. On the other hand, the employer is mainly concerned with the problem of recruitment, training, and retention of workers at wage rates that may provide them sufficient profit. In contrast, public policy concerns the early education of the workforce and the prevention of labor-management conflict.

Labor economics is concerned with issues that affect or concern the labor force. Issues that concern labor forces include: 1: Labor mobility and migration; 2. Labor markets; 3. Supply of labor; 4. Unions and collective bargaining; 5. Work leisure decision; 6. Government and institutions; 7. Participation rates of Labor; 8. Wage structure; 9. Quality of labor; 10. Personal distribution of earning; 11. Labor productivity; 12. Wages and inflation; and 13. Employment and unemployment. Most of the above issues are discussed under topics in microeconomics theory and macroeconomics.

Pay offs from the study of Labor Economics

Labor Economics is concerned with many of the important decisions facing individuals at various points in their lives, despite some of these decisions being made when the person is not actively involved in the labor market. Labor economics looks out to recognize the dynamics and functions of the markets of labor. The labor market function is by the interaction and dealing of employers and workers. Labor economics tries to understand the resulting pattern of income, employment, and wages by looking at the employers and the workers.

The study of labor economics is important for the following reasons: 1. It helps economists understand labor-related problems, e.g., issues on fair wage or salary of workers, the welfare of workers, labor productivity, workers safety, gender-related matters, job security, and job satisfaction; 2. The study is important in providing data for economic planning and policy, e.g., it helps economists know the contribution of labor services to people's income (wages and salaries). There is evidence that in most economies, labor input is the most of economic resource; and 3. The study of labor economics helps us understand the nature of the market in which labor services are bought and sold.

Concepts of Labor Economics

Labor Force refers to the total number of people who are either employed or actively seeking employment in a particular country or region. It also refers to those aged 15 years old and older and either employed or unemployed. It includes 1) individuals who are currently employed, even if only part-time, 2) individuals who are actively seeking employment.

Unemployment rate is proportion of labor force that is unemployed.

Employment rate is proportion of labor force that is employed.

Labor Force participation rate is the number of persons who are employed and unemployed but looking for a job divided by the total working-age population.

Working-age Population is composed of the active labor force (individuals who are seeking for job or currently employed) and inactive labor force (those who are 15 years old and above who are not employed nor unemployed. students, housewives, pwds).

Employed consists of persons in the labor force who were reported either as at work or with a job or business although not at work.

Underemployed refers to all employed persons who expressed the desire to have additional hours of work in their present job or an additional job, or have a new job with longer working hours.

Unemployed persons include all those who, during the reference period are 15 years old and over as of their last birthday who have no job/business and actively looking for work. Also considered as unemployed are persons without a job or business who are reported not looking for work because of their belief that no work was available or because of temporary illness/disability, bad weather, pending job application or waiting for job interview.

ACTIVITY

Write an essay explaining the importance of studying Labor Economics?

RUBRICS OF ACTIVITY

Criteria	Percentage
Organization and Structure	20%
Analysis and Critical Thinking	35%
Evidence and Support	35%
Grammar and Mechanics	10%
Total	**100%**

Lesson 2

LABOR MARKET

INTRODUCTION

A labor market is a place where workers and employees interact, where employers compete to hire the best, and the workers compete for the best satisfying job. It is constituted by demand (the firm's demand for labor) and labor supply (the worker's supply of labor). The supply and demand of labor in the market is heavily influenced by changes in the bargaining power. Michael Dider (1997) further added that labor market is a means of communication through which sellers and buyers will inform each other about what they have, what they need and the prices that they ask or propose, before closing the transaction. Buyer, representing the firms are the equity holders in the market acting as bidders regarding payment of wages and working conditions, while the sellers are individuals or owners of the human resource rendering available to employers their knowledge, skills and experience gained. The labor market operates on the principle of competition, the workers competing against each other in view of obtaining or retaining a position, while employers compete to attract and maintain within the organizations, the employees that are efficient in the development of the activity and as a result make profit. This chapter explore the dynamics and structure of labor markets, its characteristics, and the four-fold-test in determining the existence of Employer-employee relationship.

LEARNING OBJECTIVES

1. Analyze the dynamics and structure of labor markets.
2. Identify the characteristics of Labor Market
3. Determine the existence of Employer-Employment Relationship

PRESENTATION/DISCUSSION OF THE LESSON

The consequence of applying the workforce in the production which is delivered by worker and bought by the employer is known as work. It is necessary to distinguish between the work and the individual- that is between what arises from work, the process, and the individual who possess the skills and knowledge to produce those goods and services. Work in the labor market has been viewed as like any other good or service through which people sell their labor in exchange for wages. While other economists appreciate work as a commodity different from the rest of the goods (goods/services) referring rather to the supply of labor available in the labor market (Hudson, 2000). Popescu (2002) gave three conditions in order for the workforce to be classified as a cargo: 1.) the possibility to be changed with another commodity through and exchange contract;2.) giving up the ownership; and 3.) storing in time. Given that the three conditions cannot be fulfilled simultaneously, labor will not be treated as a commodity.

Characteristics of Labor Market

1. Segmented

   Labor market is segmented due to restricted mobility within the industry and between industries. It is composed of three levels: primary, secondary and tertiary. The primary level includes the workers who benefited from a higher education and training, where incomes and employment stability are higher and where there are real professional growth opportunities (Reich et.al., 1973). Large companies are especially found in this sector, companies that promote individuals, their career and salary, and levels are determined largely by their evolution on the internal market. Doeringer and Piore (1971) and Saint-Paul (1996) consider this term as a manner of organizing the labor, that consists of filling vacancies resorting to internal promotions rather than hiring new employees. Such an explanation leads to considering each sector as a group of companies, while primary / secondary segmentation can be found even within the economic entity. In the secondary sector, it was a completely different situation, namely high staff turnover, low income, low level of skills of employees, without many chances of promotion, a place where in most cases there are few professional growth prospects. Due to this segmentation, on the secondary market, employees have low wages and wage differences are due to minimal access to education and training (Bae, 2014). The tertiary level, on the other hand, contains undeclared work, determined by the evolution of the underground economy.
2. Rigid and inflexible

   Labor market is naturally rigid and inflexible, as result of geographical evolution, lifestyle, professional training, as well as by legal and institutional aspects that are determined by gaps within these systems.
3. Secondary market

   Labor market is considered as a secondary market receiving the influences of from other markets (capital market, goods and services market), being constantly linked with them, anticipating trends in the labor supply and

demand, the reaction of economic operators, receiving and transmitting, in return, medium and long-term signals and determining effects that are fund in all social-economics sectors.

4. Regulated

   It is regulated; this feature results from the particularity of the workforce as well as from the requirement to ensure employee protection, control the loyal competition through trade unions, allowing the grouping of entrepreneurs who hire wage labor. The labor market legislation must be constantly improved to fight unemployment and ensure the better management of population employment.

5. Contractual and participatory

   The contract and negotiations between employers and employees give the instruments for the mechanism of regulating supply and demand of labor with quantitative, qualitative and structural aspects (Cojuhari & Dorofeev, 2014). The relations between sellers and buyers are governed by laws and agreements between representatives of employees, employers and public power. Education, training, demographic factors determine the value of labor. The labor market is very "alive" and in a constant change.

6. Administrative market

   The labor market is an administrative market because at this level, companies manage their available resources according to the demand for necessary goods and services, that involves the workforce and considering the personnel wage plan (Ghişoiu, 2000).

7. Multidimensional

   The labor market has a multidimensional character given by the geographic, economic, educational and social scale. The geographical scale is given by the profile of the available workforce, population on age categories and the working population. The economic scale refers to the population distribution by areas of activity, professions, the public participation in the economic process, the costs implied by the inactivity of the population. The educational scale refers to average duration of learning, the population level of training, the number of people that are in a particular form of learning. The social scale refers to the costs of social protection, reconversion or insertion of employees on the labor market.

8. Inconsistent

   Workers having different levels of training, education, qualification, coming from different geographical areas, of different ages, genders, aspirations and standards making the labor market inconsistent.

9. Imperfect Market

   In the contemporary economy, the labor market is not perfectly competitive, and it probably never was. This was demonstrated by Kaufman, in his 2007 work, stating that "we have demonstrated that a perfectly competitive labor market is impossible" (Kaufman, 2007). The price of labor, which is the wage, is not formed in relation with the supply and demand on the market, as it would be natural, but is determined by factors such as the state of the national and international economies, state intervention, the bargaining power of trade

unions or patronage intervention (Ghişoiu 2000). It is very important for the performance of the labor market, to be close to the conditions of the perfect competition. The state could intervene to orient the labor market as close to perfect competition as possible or to limit the negative trends of imperfect competition. Most often trade unions are pressuring companies to increase wages regardless of the financial situation of the companies or the state of national economy, taken as a whole, which leads to low economic efficiency of companies and rising inflation (Ghişoiu, 2000).

Existence of Employment Relationship

Employer-employee relationship refers to practical and legal connection between an employer and an employee characterized by mutual obligations where the employer provides work and compensation, and the employee performs the work under the employer's control. In the Philippines, labor law principles and social legislation govern this relationship by establishing, regulating, and protecting the rights and obligations of both employers and employees.

According to R.A. No. 8282 also known as Social Security Law, employer is any person, natural or juridical, domestic or foreign, who carries on in the Philippines any trade, business, industry, undertaking or activity of any kind and uses the services of another person, who is under his orders as regards the employment, except the Government and any of its political subdivisions, branches or instrumentalities, including corporations owned or controlled by the Government. While employee is defined as any person who performs services for an employer in which either or both mental and physical efforts are used and who receives compensation for such services, where there is an employer-employee relationship.

The existence of an employer-employee relationship is determined through the **Four-Fold Test** particularly:

1. Selection and engagement of the employee;
2. Payment of wages;
3. Power of dismissal; and
4. Power of control, or the Control Test. (Azucena, 2016)

The power of control refers to the existence of power and not necessarily to the actual exercise thereof. It is not essential for the employer to actually supervise the performance of duties of the employee; it is enough that the employer has the right to wield that power. Absent the power to control of the employer with respect to the means and methods by which the employee's work was to be accomplished, there is no employer-employee relationship between the parties.

Kinds of Employment

1. As to tenure

a. Permanent – who is appointed to a job for an undefined and indefinite period. Also called “regular” employee or one who is doing a job which is “necessary or desirable” to the usual business of the employer.

b. Casual- one who is employed to perform work that is incidental to the business.

2. On the basis of salary component

a. Monthly-paid – where the salary covers all the days of the month including the rest days and holidays
b. b. Daily-paid – salary only covers the day or days worked

3. As to the Labor Code Book VI

a. Regular- Those who are hired for activities which are necessary or desirable in the usual business of the employer. *(Abad, Jr., 2015)*

b. Project -Employed for a specific project or undertaking where the completion or termination of which is determined at the time of his engagement.

c. Seasonal- Employment where the job, work, or service to be performed is seasonal in nature and the employment is for the duration of the season. *(Sec. 5(a), Book VI, Rule I, IRR)*

d. Casual- an employment where the Ee is engaged in an activity which is not usually necessary or desirable in the usual business or trade of the Er, provided, such employment is neither Project nor Seasonal. (*Art. 295, Labor Code)*

e. Probationary - probationary employment where the employee upon his engagement is made to undergo a trial period during which the employer determines his fitness to qualify for regular.

Requisites for valid Probationary Employment

- There must be a written contract
- Must spell out that the employee will go through a probationary period of employment for a specified number of months
- The contract must specify reasonable standards on the basis of which his performance will be evaluated
- There must be an assessment
- The result must be communicated to the employee.

f. Fixed term - A contract of employment for a definite period terminates by its own terms at the end of such period. *(Brent School v. Zamora, G.R. No. L-48494, 05 Feb. 1990)*

ACTIVITY

I. Identify whether there is an employee- employer relationship in the following scenarios and explain:

a. Jeepney Drivers and Jeepney operators
b. Car Dealer company and its agents
c. Security Guards and their agency
d. University and its part-time faculty members
e. Guest Relation Officers and the Night Club Owner

II. Identify the type of employment in the following scenarios and explain:

a. Seamen
b. Construction workers of a firm
c. Cocoa farmers
d. Coach in a University Basketball Team
e. Sales Lady in a retail shop

Lesson 3

LABOR SUPPLY

INTRODUCTION

As a component of the labor market, this chapter focuses on the definition, theories and principle of Labor supply to a firm and industry both in a purely competitive market and monopsony.

LEARNING OBJECTIVES

1. Identify the theories and principles of Labor supply
2. Analyze the supply labor to an industry and to the economy as a whole
3. Compute the elasticity of Labor Supply and determine its factors

PRESENTATION/DISCUSSION OF THE LESSON

Supply of Labor

Defined as the number of workers willing and able to work in a particular job or industry for a given wage, labor supply in each industry is upward sloping-as wages rises, other workers will enter this industry being attracted by the incentive of higher rewards. The extent to which the increase of the wage leads to an expansion in labor supply depends on the elasticity of labor supply.

Theory of Labor Supply

The standard tools of consumer theory is used to derive the static theory of labor. As we review, the consumer theory helps us understand how a consumer allocates a

certain amount of income to his expenditure on different goods. Thus, the utility-maximizing bundle will depend on the level of income and the relative prices of the different goods. People derive their income from working by selling their work. Given twenty-hours (24) hours a day, a person has two ways to spend his time: leisure and work. Through their earnings, they can buy consumption goods and services. If they want to consume more goods or services, they will have to work more. Work in relation to leisure is considered as 'bad'.

In the standard consumer model, it is assumed that individual's utility depends on consumption and leisure. Leisure is the amount of time that workers devote to nonproductive activities, and therefore it is a 'good,' wherein:

L=T-H

Where L is leisure; T is the individuals time endowment, and H refers to work hours. An increase in hours of work will result in a fall in leisure. This is also known as the time constraint.

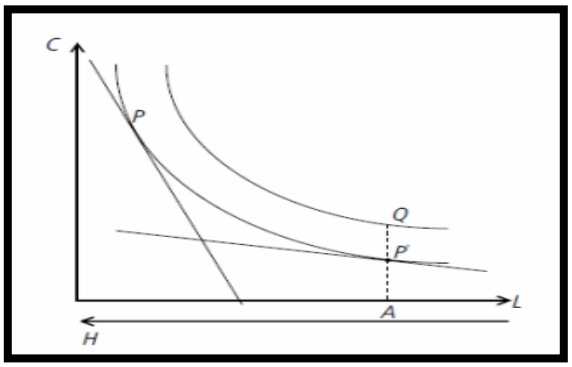

Figure 3.1 Indifference curve

The indifference curve shows the relationship of leisure vis a vis consumption. On the horizontal axis is leisure, and on the vertical axis, consumption. Since, as leisure increases, hours of work decrease, one can travel from right to left on the horizontal axis to measure hours of work H. At the origin, for example, L = 0, which implies that H = T. But as we move to point A, leisure has increased, which suggests that hours of work have decreased.

The marginal rate of substitution (MRS) is the slope of the indifference curve at a given point. It measures the change in consumption that is required to keep utility unchanged as leisure changes by one unit and is expressed as:

dC/dL|U

A rational consumer wants to maximize his utility. However, a consumer faces two constraints: budget constraints and the total number of hours he can work in the market, which cannot be greater than time. Budget constraint comes from the fact that extra consumption can only be afforded at the cost of extra work. Participation Decision Participation in the labor market can be affected by wages. People tend to participate if they will be offered a high enough market wage (W). If the worker were offered an

unreasonably low wage, he would rather not work. Reservation wage (W*) is defined as the minimum wage rate, which makes a worker indifferent between working and not working. The worker will participate in the labor market if the market wage is at least equal to the reservation wage:

$$W>W^*$$

If W>W*, then the individual will work. To determine the optimal hours of work decision, recall from the consumer theory that the optimum is achieved at the tangency point between the indifference curve and the budget line. The optimal condition is, therefore:

$$|MRS| = W$$

The worker's subjective evaluation of the trade-off between consumption and leisure (the MRS) must be equal to the market evaluation, which is the market price of leisure, that is, the wage rate (W).

Individual Labor Supply

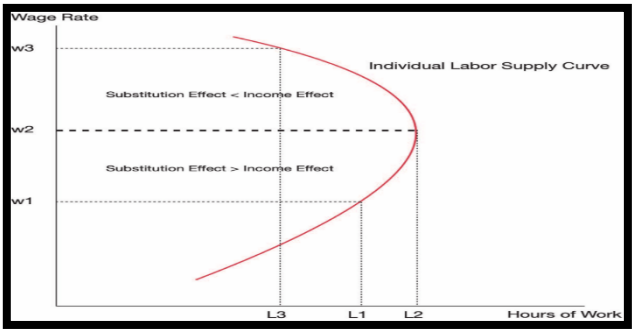

Figure 3.2 Individual Labor Supply Curve

Individual labor supply is backward bending showing how *income effect and substitution effect* affect the decision of a person whether to choose between leisure or work, emphasizing that leisure is the opportunity cost of work and vice versa. If wage increase, income also increase (income effect) hence, looking into the positive effect of income, if income increases, people are more willing to work. Therefore, as income increases, people will choose work over leisure. Looking into the negative side, if wages increases, income also increases and instead of working more hours, people opt to work less when he obtain his desired income. Further, an increase in wages leads to an increase in the opportunity cost of leisure (substitution effect). In cases where an increase is relatively low, individual tends to work more, therefore cost of leisure (substitution effect) is positive as well as the income effect. The total wage effect is positive. As wages continuously increase, income increases, leading to a positive substitution effect. But the income effect slows down since some workers already experience the negative income effect when they already reached their desired income. Here, total wage effect is still positive. In cases where the income is relatively high, more individuals already reached their desired income hence negative income effect is present while substitution effect is positive. This time, negative income effect outweighs the positive substitution effect creating a backward bending supply curve.

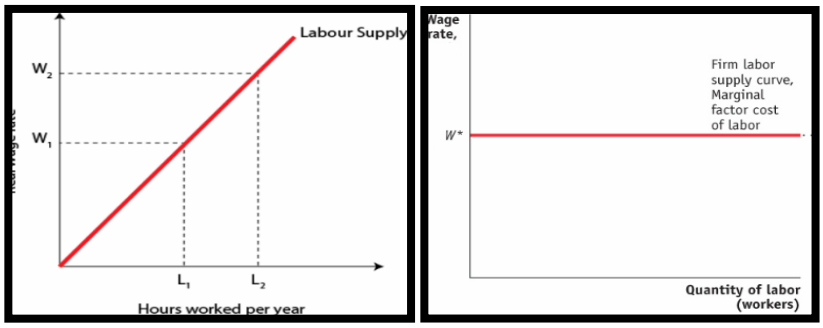

Figure 3.3 Market Labor Supply Curve and Firm's Labor Supply Curve

Labor supply in a purely competitive labor market is still upward sloping despite the backward bending individual supply curve. This is because as wages increases, some workers may decide not to join the market, but more workers are willing to join replacing those who left. Further, workers in a firm operating in a purely competitive labor market are wage takers hence, firm's labor supply becomes perfectly elastic. Labor supply is also equal to the average cost and marginal cost of hiring more workers in the market.

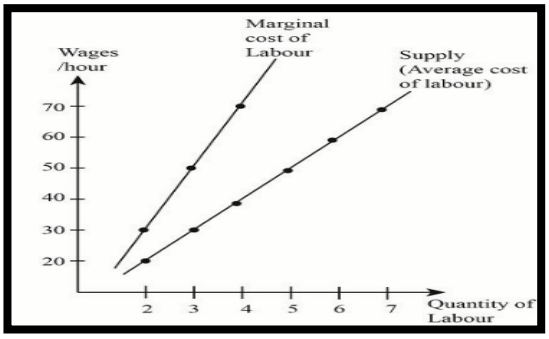

Figure 3.4 Monopsony Labor Supply Curve

If there is only one employer(buyer) in the labor market, and everyone is willing to be employed by that employer, monopsony exists. Monopsony labor supply is upward sloping to show that whenever there has been an increase in wages of workers, it will result to an increase in the quantity of labor being supplied in the market. However, an increase in the wages leads to an increase on the cost which is absorbed twice by the employer (MC).

Determinants of Labor Supply

1. Wage offered in substitute occupation
   An increase(decrease) in wage offered in the substitute occupation attracts(discouraged) workers to join the industry, thus, having a negative impact in the prevailing labor market.

2. Barriers to entry

Barriers such as specific education requirements or licensing can restrict the labor supply in certain industries leading to higher wages for those who can overcome these barriers.

3. Non-monetary Characteristics of the Job
   These include benefits, convenient location, hours of work, job satisfaction, good social life in the area which could have a positive or negative impact.

4. Improvement of Occupational Mobility of Labor overtime
   The ability of workers to move freely between jobs and industries is leads to an increase or reduction of supply of labor in the market.

5. Size of Labor Market
   The size of the labor market (populations size, labor participation rate, economic conditions, etc.) can influence the amount of labor the workers are willing to offer at a given wage.

6. Value of Leisure
   When persons value leisure time, they may choose to work fewer hours, even if it means earning less, if they can spend more time on activities they enjoy, leading to a decrease in labor supply.

Elasticity of Supply

Elasticity of Supply is defined as the percentage change in amount of Labor supplied due to a percentage change in wage rate. Thus, measuring the sensitivity of labor supply to a rise or reduction to the wage rate. When wage elasticity of labor supply is high, workers will significantly alter their labor supply in response to the changes in wage rate. If wage elasticity is low, workers are less responsive to changes in wage rate.

The sign of the labor supply elasticity depends on whether the labor supply curve is upward sloping(L/<0) or downward sloping (L/>0). Elasticity can be influenced by non-wage factors such as the industry's specific skills and educational requirements and time under considerations. The more complicated the skills are, and the higher or longer time achieve the qualifications required, the more inelastic the supply is. The time period under consideration is also a factor affecting the supply: in the short run, the supply curve of labor tends to be inelastic as it takes time for people to respond to the changes in relative wages.

ACTIVITY

1. Explain the relation between utility and labor supply in the market.

2. Tell whether there will be an increase or decrease in the labor supply in the market.
   a. Enactment of law granting 14th month pay to employees of private firms
   b. Increase in the wage offer of Accounting Firm A compared to Accounting Firm B
   c. A potato fries brand hiring sales representative with a college degree
   d. Growing population of young adults in the Philippines
   e. More Filipinos are choosing to spend their holiday break in Baguio City

Lesson 4

LABOR DEMAND

INTRODUCTION

After discussing the supply of labor, we will now turn to the other side of the coin and study the demand for labor. In studying the demand side of the market, we will look at how many workers a firm will decide to put on its payroll when it is profitable for a firm to hire new workers and when it will be more likely that workers will be fired.

LEARNING OBJECTIVES

1. Demonstrate the relationship of Wage rate, productivity and labor demand.
2. Determine the equilibrium level of wages and employment.

PRESENTATION/DISCUSSION OF THE LESSON

Demand for Labor

Consider a company that produces some good or service, which sells at the market price. The revenue of that firm is the price of each unit of output, P, times the number of units produced, Y.

Revenue = P*Y

This firm produces output through the use of factories, machines, office space, etc. (i.e., capital) and hiring a given number of employee hours (i.e., labor) to operate the machines and sell the goods. We will summarize the production capabilities of the firm by using the following production function:

Y=F (L, K)

Where L is the total number of hours the firm hires, while K is the capital. We will assume that no output can be produced without using some labor and some capital and that an extra unit of labor or capital increases output. The total cost of producing a given

level of output for the firm is the number of hours of work it hires times its price, the wage rate W, plus the amount of capital times its rental price, R:

Cost = W*L + R*K

The firm's objective is to choose the level of output that maximizes its profits (the difference between revenue and cost). The demand for production inputs (such as capital and labor) is a derived demand, in the sense that inputs are bought and rented for their contribution towards the production of the good or service that the firm sells. The demand for labor at the firm's level in the short run: We will start by considering the case where capital is in place and cannot be expanded in the short-run (i.e. K = k). The short-run analysis is of interest as the assumption that office space, machines, and other things cannot be expanded immediately to accommodate changes in output is quite realistic. When the stock of capital is fixed, the only way to increase output in the short run is to hire more hours of work. However, it is usual to assume that the increase in output generated by an extra hour of work decreases as more hours of work are hired

This property is called the law of diminishing returns. In the short run, when capital is fixed, the only part of the firm‘s variable costs is the wage bill (there is a fixed outlay equal to the cost of capital, R*k). The choice of L, and therefore of output that maximizes the firm‘s profit in the short run, is obtained by setting the value of the marginal revenue of labor equal to the marginal cost of labor.

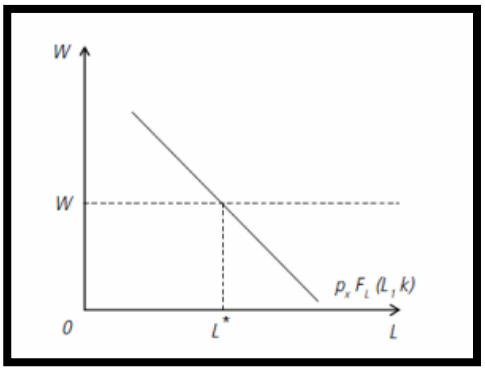

Figure 4.1 Labor Demand Curve

If the firm takes the product price and the wage rate as given, this condition can be written as

P*FL(L, k)=W

The demand for labor is determined by solving equation

L=LSR (W, P, k).

As shown from Figure 4.2, an increase of the wage rate from W0 to W1 in this firm only (i.e., leaving P constant) will decrease the demand for labor from L0 to L1 in that firm. In general, the demand for labor is downward sloping.

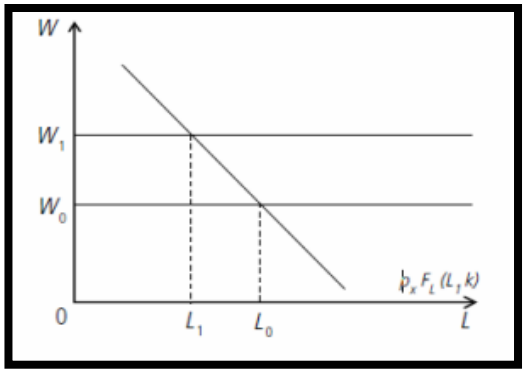

Figure 4.2 Increase in Wage rate and Labor Demand

The demand for labor at the level of the industry

What happens with demand for labor when the wage rate increases from W0 to W1 for the whole industry? Individually, as we have seen, all firms will be willing to decrease the employment and output. The increase in the wage rate at the industry level will shift the output supply function of the industry, S, to the left (which would not happen if only one firm would face a wage rate increase). If the demand for output is a negatively sloped function, D, the shift in supply will increase the equilibrium price of output. We draw this process in Figure 4.3. The increase in the price of output will shift out the value of marginal product function, counterbalancing some of the falls in employment. However, it can be proved that P will rise proportionally less than W so that the effect on employment and output will not disappear completely. Therefore, the short-run demand for labor at the industry level is also negatively sloped.

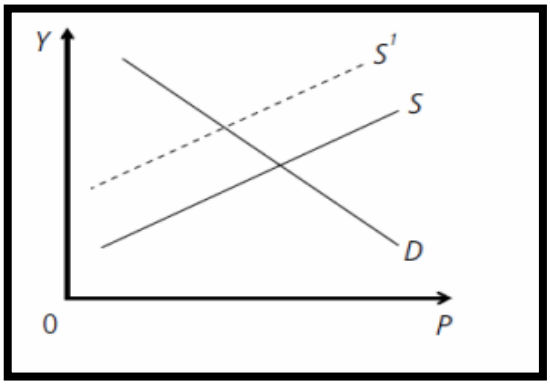

Figure 4.4 Labor Demand in industry

Non-wage Determinants of labor demand

1. Price of the good or service

Labor demand being a derived demand is influenced by the prices of goods and services. The higher the price of the good or service, the more profitable it is for firms to produce it, and the more labor they will demand.

2. Productivity of labor
   The more productive workers are, the more output they can produce per hour, and the more labor firms will demand.
3. Cost of labor
   The higher the cost of labor, the less profitable it is for firms to hire workers, and the less labor they will demand.
4. Cost and availability of substitutes
   If there are good substitutes for labor, such as capital or automation, firms will be less likely to demand labor.
5. Level of technology
   The higher the level of technology, the more productive workers can be, and the more labor firms will demand.
6. Level of government regulation
   The more regulations there are on businesses, the more costly it is for them to operate, and the less labor they will demand.
7. The level of economic activity
   The higher the level of economic activity, the more goods and services are being produced, and the more labor firms will demand.

Elasticity of Labor Demand

Elasticity of Demand for Labor measures the degree of responsiveness of labor demand to a change in the wage rates.

Labor demand is elastic when the change in wage rates will have a proportionally greater effect on employment levels. It is inelastic when the change rate is going to have a proportionally smaller effect on employment levels. Short-run labor demand remains to be inelastic as firms must deal with the onboarding and training cost to integrate new employees into their system.

Other factors may also influence the labor demand. Labor demand can be wage elastic when labor cost is high percentage of the total operating cost. Also, if firms find it both difficult and also costly to substitute capital inputs for labor, then demand will tend to be wage elastic. Price elasticity of demand for final good and services can also affect the elasticity of labor demand. If consumers have elastic demand to goods and services, demand for labor may also be elastic.

ACTIVITY

1. Why does a profit-maximizing firm hire workers up to the point where the wage equals the value of marginal product?
2. Why is the short-run demand curve for labor downward sloping? Differentiate it to the long-run demand for labor.
3. Explain how does the increase and decrease in wag rate affect the employment levels provided that the labor demand is elastic and inelastic.

UNIT II

Lesson 5

WAGE DETERMINATION AND RESOURCE ALLOCATION

INTRODUCTION

In the demand of labor, employers had few managerial decisions to make; they found the market wages of various kinds of labor and marginal productivity schedules and hired the profit-maximizing amount of each kind. In such case, employers need not to design a policy for compensation. But some employers pays attention to their compensation policy; therefore, they must secure a balance between the costs of raising the wages of their trained workers against the savings generated from a higher probability of retaining these workers. Moreover, when the compensation package is expanded to include such items as employee benefits or job safety, employers must decide on the mix of wages and other valued items in the compensation package as wages include facilities and supplements favoring the employees. In certain conditions, employers will behave monopsonistically, setting their wages rather than taking them as given. This chapter will explore in more detail the complex relationship between compensation and productivity.

LEARNING OBJECTIVES

1. Describe wage determination in a labor market.
2. Analyze the interrelatedness of labor supply and labor demand to determine the level of hourly wage rate.
3. Explain the elements of perfectly competitive labor market.

PRESENTATION/DISCUSSION OF THE LESSON

Purely Competitive Market

A purely competitive labor market has the following characteristics:

1. A large number of firms competing to hire a specific type of labor.
2. Numerous people with homogeneous skills who independently supply their labor services.
3. Wage taking behavior.
4. Perfect, costless information and labor mobility.

As discussed, the labor market has two components, labor demand and labor supply.

Overview of Labor Market Equilibrium

The labor market is the place where the workers are looking for jobs and the firms looking for workers finally meet each other and compare wage and employment offers. The interaction between the workers and firms that occurs in the labor market determines the equilibrium wage and employment levels: the wage and employment levels that "balance" the number of hours that workers wish to work with the number of employee-hours that firms want to employ. Figure 5.1 illustrates the labor demand and labor supply curves in a particular labor market. As shown, the supply curve slopes up, assuming that substitution effects dominate income effects. The demand curve is negatively sloped. The equilibrium wage and employment levels in this market are given by the point where the supply and demand curves intersect. A total of E^* workers are employed, and each receives the market wage of w^*. At the intersection, the demand curve indicates that firms are only willing to hire E_D workers, and the supply curve indicates that E_S workers are looking for work.

A wage above the equilibrium level implies that there is a surplus of workers competing for the few available jobs. This competition puts downward pressure on the wage. When the wage is above the equilibrium level, the competition for jobs drives down the wage. If firms were offering a wage below the equilibrium level, such as w low in Figure 3.5, the situation would be exactly reversed. Employers want to hire many workers, but few persons are willing to work at the going wage.

The competition among employers for the few available workers puts upward pressure on the wage and moves the wage up toward equilibrium. Once the labor market attains the equilibrium wage, the conflicting wishes of employers and workers have been balanced. At this wage, the number of workers looking for work equals the number of workers that employers want to hire. In the absence of any other economic shocks, the equilibrium level of the wage and employment can then persist indefinitely.

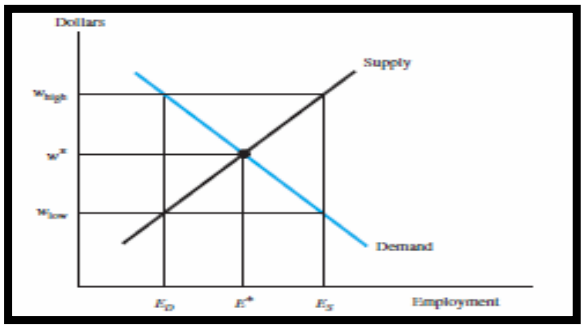

Figure 5.1 Labor Market Equilibrium

THE HIRING DECISION BY AN INDIVIDUAL FIRM

It was shown on Figure 5.2 that an individual firm chose to hire workers when the downward sloping demand for labor is equal to the horizontal supply of labor.

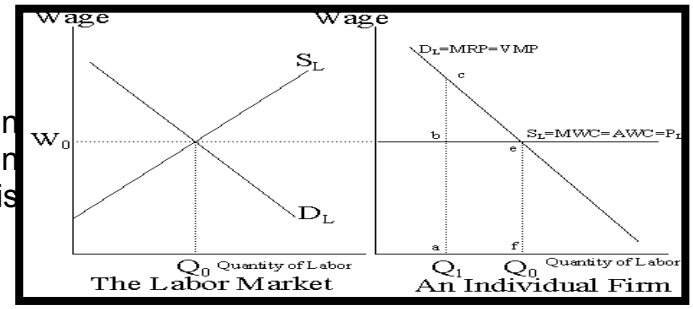

Figure 5.2 Hiring Decision in Labor Market

Allocative Efficiency

There is an efficient allocation of labor when workers are being directed to their highest value uses- when society obtains the largest amount of output from the given amount of available labor. This only means that the value of the marginal product of labor (VMP) is the same in all alternative employments.

In cases where the VMP of the last unit of labor in the industry of a firm (A) is higher than the VMP of the last unit of labor employed in another industry (B), the total output would increase by reallocating a unit of labor from industry B to industry A. The additional production value in A will be greater than the value of the last production in B. To generalize from two industries to many, the VMP of the last unit of labor hired in each industry must be the same for an efficient allocation of labor in a society to exist.

It is also true that the VMP of labor must be equal to the wage paid to that labor. It's because the price of labor must be high enough to cover its opportunity cost, or the labor would not be forthcoming. Firms will be willing to hire additional workers if their VMP is greater than their marginal wage cost (the wage rate in competitive labor markets). Since the VMP is down sloping, firms will continue to hire workers until the VMP falls to equal the wage rate. Employing more than that will reduce the firm's profits.

Impact of Product Market Monopoly and Monopsony

In a Monopoly, a firm with monopoly power in the product market faces a down sloping demand curve, which means that it must reduce its price to increase its sales. Also, in a monopolistic firm, the marginal revenue is less than the price at which it sells that last unit of product.

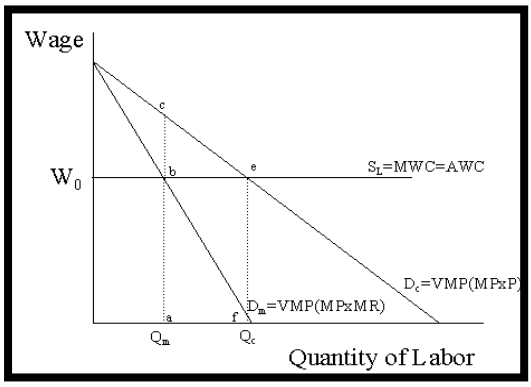

Figure 5.3 Hiring Decision in Monopsony

In Figure 5.3, it is assumed that the firm is hiring labor in a competitive labor market, but this labor is producing a product for which the firm has monopoly power. Hence, the monopolistic firm is a "wage-taker, but a price-maker".

Outcomes:

1) the monopolists labor demand curve is less elastic than the commutative curve.

(2) the monopolist behaves in the same way as the competitor by determining its profit-maximizing level of employment where MRP=MWC. Nevertheless, this equality produces a lower level of employment than would occur under competitive product market conditions.

(3) the wage paid by the monopolist is the same as that paid by competitive firms. Without unions both are wage-takers.

(4) labor resources are misallocated. In perfect competition the price of labor reflects the marginal opportunity cost to society of using a resource in a particular employment. In the figure, VMP>P(L) for workers not hired by the monopolist. This implies too few labor resources are being allocated to this employment and therefore too many are allocated somewhere else.

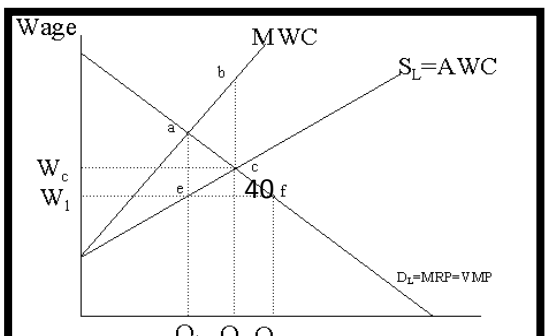

Figure 5.4 Monopsony Model

The labor supply curve is upward sloping because the monopsonist is the only firm hiring labor, facing the market labor supply curve. S(L) is also the firm's average wage cost. Marginal wage cost is above and rises more rapidly than supply of labor S(L) because the higher wage rate paid to attract an additional worker must also be paid to all already employed workers.

To maximize profits, MWC should be equal to MRP. If it was transferred into a perfectly competitive market, the equilibrium wage and quantity of labor would be found at the intersection of the supply and demand of labor curves. But it is not profitable for the monopsonist to hire the "competitive" number of laborers and pay them the "competitive" wage rate. Instead, it restricts the quantity of labor hired and pays a lower-than-competitive wage and a wage below the MRP of the last unit of labor employed.

Wage in the Philippines

It is the remuneration or earnings, however Designated Capable of being expressed in terms of Money, Whether fixed or ascertained on a time, task, piece, or commission basis, or other method of calculating the same, Payable by an employer to an employee under a written or unwritten contract of employment – for work done or to be done or for services rendered or to be rendered. *It differs in salary since the latter* paid to white collar workers and denote a higher grade of employment, subject to execution, garnishment or attachment while wages paid for skilled or unskilled manual labor and not subject to execution, garnishment or attachment except for debts related to necessities. It also includes Wage includes the fair and reasonable value of facilities furnished by the employer to the employee while allowances are excluded from the basic salary or wage computation.

Bonus, 13th Month Pay

A bonus is an act of gratuity on the part of the employer and is a management prerogative which cannot be forced upon the employer. PD 851 (The 13th-Month Pay Law) and the Revised Guidelines on the Implementation of the 13th Month Pay Law states that all employers are hereby required to pay all their rank and file employees a 13th month pay not later than Dec 24 of every year, Provided that they have worked for at least one (1) month during a calendar year. Equivalent” of a 13th month pay includes

Christmas bonus, mid-year bonus, cash bonuses; and Other payments amounting to not less than 1/12 of the basic salary. But shall not include cash and stock dividends, cost of living allowances and all other allowances regularly enjoyed by the employee, as well a non-monetary benefit.

Holiday Pay

Holiday pay is a one-day pay given by law to an employee, even if he does not work on a regular holiday. This gift of a day's pay is limited to each of the 12 regular holidays.

Regular holidays

RA 9492 and RA 9849 (which added the two Muslim holidays) provide for the observance of the following regular holidays:

1. New Year's Day – Jan. 1
2. Maundy Thursday – Movable date
3. Good Friday – Movable date
4. Araw ng Kagitingan – Monday nearest Apr. 9
5. Labor Day – Monday nearest May 1
6. Independence Day – Monday nearest June 12
7. Eid'l Fitr – Movable date
8. Eid'l Adha – Movable date
9. National Heroes Day – Last Monday of August
10. Bonifacio Day – Monday nearest Nov. 30
11. Christmas Day – Dec. 25
12. Rizal Day – Monday nearest Dec. 30

Special (Non-Working Days)

RA 9492 and RA 10966 provide for the observance of the following special holidays:

1. Ninoy Aquino Day – Monday nearest Aug. 21
2. All Saints Day – Nov. 1
3. Immaculate Conception of Mary *[RA 10966]* – Dec. 8
4. Last day of the year – Dec. 31

Proclamation 269 fixed the data for the observance of the regular and special holidays including additional special holidays for 2018 and 2019 The dates for Eid'l Fitr and Eid'l Adha (special holidays) shall follow approximate dates of the Islamic holidays have been determined.

Holiday pay computation

An employer may require an employee to work on a regular holiday but such employee shall be paid a compensation equivalent to twice his regular rate. If an employee is required to work on a special holiday, the additional compensation should be 30% of his regular rate.

According to DOLE Memo Circular 1-04, a “special holiday”/”special day” includes the National Special Days, and declared special days such as Special Non-working Holiday, Special Public Holiday and Special National Holiday. Such days are entitled to the rates prescribed above. These days are not the same as a special working holiday. A special working holiday is considered an ordinary working day, so there is no premium pay.

Moreover, if there is no work performed by the employee, there can be no wage or pay, unless the laborer was able, willing and ready to work but was prevented by management or was illegally locked out, suspended or dismissed. Moreover**,** the age-old rule governing the relation between labor and capital or management and employee is that a "fair day's wage for a fair day's labor." It is hardly fair or just for an employee or laborer to fight or litigate against his employer on the employer's time. Also, there is a prohibition against elimination or diminution of benefits. No wage order issued by any regional board shall provide for wage rates lower than the statutory minimum wage rates prescribed by Congress.

a. Payment by hours worked

The minimum wage rates for agricultural and non-agricultural employees and workers in each and every region of the country shall be those prescribed by the Regional Tripartite Wages and Productivity Boards.

b. Payment by results

The Secretary of Labor and Employment shall regulate the payment of wages by results, including pakyao, piecework, and other noontime work, in order to ensure the payment of fair and reasonable wage rates, preferably through time and motion studies or in consultation with representatives of worker’s and employer’s organizations.

Payment of wages

According to Article 102 of the Labor Code, no employer shall pay the wages of an employee by means of promissory notes, vouchers, coupons, tokens, tickets, chits, or any object other than legal tender, even when expressly requested by the employee. Exception to this rule is the payment of check or Money Order if customary or necessary because of special circumstances, as specified by the Secretary of Labor or the CBA.

Time of Payment

Payment of wage must be at least once every 2 weeks or 2x per month and must not be more than 16 days except in cases of force majeure or circumstances beyond ER's control, but the employer must pay immediately after cessation and not less than once a month.

ACTIVITY

1. Determine whether there is a change in the minimum wage if the following circumstances happened, then explain.
    a. increase in both demand and supply of labor
    b. Decrease in both demand and supply of labor
    c. increase in demand of labor
    d. decrease in supply of labor.

2. ABC company is an electric company providing services to households in a faraway land. The company wants to determine whether it is feasible to agree on the plea of its collective bargaining unit to increase the wages of its employees. If you are the companies' senior economist, what will be your advice? Explain.

3. Suppose the minimum wage in the National capital Region (NCR) increases, what do you think would be the effect on the labor market?

4. A works as a machine operator at Company XYZ. His daily wage is 300 pesos for working from 8am-5pm. On Saturdays, he is always asked to render work from 8am-6pm. Is A entitled to additional pay under the law? Explain.

Lesson 6

LABOR UNIONS AND COLLECTIVE BARGAINING

INTRODUCTION

Self-organization is a fundamental right guaranteed by the Philippine Constitution and the Labor Code. Employees have the right to form, join or assist labor organizations for collective bargaining or their mutual aid and protection. It shall be unlawful for any person to restrain, coerce, discriminate against, or unduly interfere with employees and workers in their exercise of the right to self-organization. Labor organization means any union or association of employees which exists in whole or in part for collective bargaining or of dealing with employers concerning terms and conditions of employment.

Some 600 national trade unions, industrial federations, and plant-level unions from private and public sectors are registered in the Philippines. However, they represent less than 10 percent of the 38.8 million-strong workforce. Among these are the Federation of Free Workers (FFW), Kilusang Mayo Uno (KMU), Sentro ng mga Nagkakaisa at Progresibong Manggagawa (SENTRO), and the Trade Union Congress of the Philippines (TUCP). Their primary concerns include decent work for job seekers and job preservation for the employed.

This chapter argues that unions, like workers attempting to maximize utility and firms attempting to maximize profits, choose various options to maximize their members' well-being. As a result, the labor market impact of unions depends not only on the political and institutional environment that regulates the employer-union relationship but also on the factors that motivate unions to pursue certain strategies, such as making wage demands that may lead to a strike) and to ignore others. It has long been recognized that only under certain conditions can unions arise and prosper. Because firms' free entry and exit into the marketplace reduce profits to a normal return on investment (that is, zero excess profits), where unions can flourish only when firms earn above-normal profits, or what economists call “rents.” In effect, unions provide an institutional mechanism where employers share the rents with workers. This chapter looks into how unions influence the terms of the employment relationship between workers and firms. We will find how unions influence or affect practically every aspect of the employment contract, including hours of work, wages, fringe benefits, labor turnover, job satisfaction, worker productivity, and profitability.

LEARNING OBJECTIVE

1. Need for and characteristics of labor unions
2. Collective bargaining versus ordinary market transaction
3. Resolution of wage rate determination

4. Impact of collective bargaining on wage, efficiency, productivity, firm probability

PRESENTATION/DISCUSSION OF THE LESSON

Labor Union in the Labor Market

Labor unions improve conditions for workers in ways that promote individual, family, and community well-being. Yet, the relationship between public health and organized labor is not fully developed. Despite labor unions' historic and current efforts to improve workers' conditions, public health institutions have rarely sought out labor as a partner.

In 2014, American labor union density was at a 99-year low. Low union density has left workers vulnerable to reduced health and safety standards and has fed the decline in public perception of the value of unions. Unions helped to codify economic equity in the workplace, and the decline of their power is closely associated with the greatest level of economic inequity in our nation's history. The erosion of union density has undermined the role of organized labor as a societal power equalizer.

Income is a key social determinant of health, associated with the living environment and the overall well-being of individuals or families. Income is considered higher in union jobs than in nonunion jobs, especially for lower-skilled workers. Retirement or pension plans create financial stability to promote health into old age. Union employees are more likely to have a retirement or pension plan and more likely to participate in a retirement plan sponsored by their employer than employees who are not members of a union.

Researchers have established a correlation between unionized work and a higher percentage of pay coming in the form of highly valued benefits. Unions have been historically involved in creating healthy and safe workplaces, advocating regulations that are monitored and enforced by public health entities such as the Occupational Safety and Health Administration.

Autonomy and control over one's life are associated with positive health outcomes, and social support in the work environment enhances psychological and physical health. Conversely, perceived job insecurity is associated with risk factors for poor health outcomes, contributing to racial and socioeconomic health disparities. Unions help members to gain control over their scheduling, and union membership is related with the increased democratic participation.

The American Public Health Association is supporting the role of labor unions in promoting healthy working conditions, health and safety programs, health insurances, and democratic participation. The decline of union density may undermine public health in the United States, making this a critical time for public health to support labor unions actively.

Previous researchers published in *AJPH,* highlighted the links between unions, working conditions, and public health but called for more research to establish the precise mechanism of the relationships. Malinowski et al. proposed the

social–ecological model as theoretical framework for connecting public health and labor organizing. Both labor unions and public health organizations intervene in the conditions that make people healthy through individual life choices, and social and community networks, as well as general socioeconomic, cultural, and environmental conditions. Malinowski et al. illustrate the overlapping interests of labor unions and public health and how their lack of coordination has created barriers for both institutions.

One mechanism union use to promote public health is the union contract. These are legally binding, durable over a designated time, and specific. They are durable because they cannot be changed unilaterally, and contracts that follow often build on the progress of previous negotiations. Even after a contract expires, federal labor law provides a process and momentum for negotiating a new one.

Determinants of Union Membership

Workers choose whether to join a union. A worker joins if the union offers him a wage employment package that provides more utility than the wage-employment package provided by a nonunion employer. To see the worker's trade-off in this decision, consider the familiar model of labor-leisure choice where a worker maximizes utility by choosing the consumption leisure bundle where the indifference curve U is tangent to the budget line (or point P). The nonunion worker consumes L * hours of leisure and works h * hours. Union organizers target the firm, and these organizers promise a new and improved employment contract. In particular, the union promises a wage increase. The worker's budget line, therefore, grows wider.

The worker knows that there is no free lunch. The wage increase comes at a cost, and the cost may be a cutback in employment. Suppose that the firm's demand curve for labor is downward-sloping and elastic. If the firm responds to the union wage increase by moving up the labor demand curve, the union-mandated wage increase reduces the worker's workweek. Therefore, if the union organizes the firm's workforce, the workers would be worse off. This worker, therefore, opposes the union in the certification election. If the firm's demand for labor is inelastic, the employment reduction is small, and the union offers the wage-employment combination. The union shifts the worker to a higher indifference curve and supports the union in the certification election.

Strikes

Economists have had a tough time explaining why strikes occur. The problem can be easily described. Suppose there is $100 worth of rents to be shared between the union and the firm. The downward-sloping line as shown illustrates the many ways in which these rents can be shared. The firm offers the division of rents indicated by point R_F, where the firm keeps $75, and the union gets $25. The union makes the counteroffer at R_U, where the union holds $75, and the firm receives $25. Neither party wants to give in to the other, so a strike occurs. Strikes are costly to both parties. The firm's profits decline; it may lose customers permanently, and a highly publicized strike may diminish the long-run value of the brand name. Workers lose income and perhaps

it can cost their jobs. As a result of these costs, the size of the available pie shrinks, and the two parties finally come to terms at point *S,* where each party gets $40. As a result of the strike, the firm kept a bigger share of the pie than the union wanted to give (that is, $40 versus $25), so the firm can claim that it "won."

Similarly, the union gets a more significant share of the pie than the firm was willing to grant (again, $40 versus $25), and the union also can claim that it "won." Both sides, however, achieved a hollow victory. After all, if both parties could have foreseen the result, they could have agreed to other sharing solutions (such as point *R* *, where each side keeps $50), which would have made both parties better off relative to the poststrike outcome. In other words, strikes are not Pareto optimal. When the parties have reasonably good information about the costs and the likely outcome of the strike, it is irrational to strike. The firm and the union can agree to the strike outcome in advance, save the cost associated with the strike and share the savings between them, and both parties will be better off. The irrationality of strikes has come to be known as the Hicks paradox.

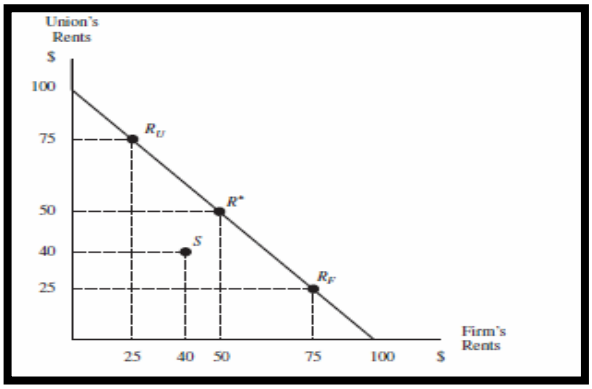

Figure 6.1 Pareto Optimality in Union Firm Negotiation

The firm makes the offer at point *R F*, keeping $75 and giving the union $25. The union wants point R_U, getting $75 for its members and giving the firm $25. The parties did not come to an agreement, and a strike occurs. The strike is costly, and the poststrike settlement occurs at point *S;* each party keeps $40. Both parties could have agreed to a prestrike settlement at point *R* *, and both parties would have been better off.

Union Wage Effects

By how much do unions increase the wages of their members? We begin our analysis of this important question by defining precisely what we mean by a "union wage effect."

Suppose a particular worker *i* earns w_i *N* if he works at a nonunion job but would earn w_i *U* if the firm became unionized. The percentage wage gain *for this worker* is defined as

$$\Delta_i = \text{Union wage gain for a particular worker} = \frac{w_U^i - w_N^i}{w_N^i}$$

Suppose there are *k* workers in the labor market. We could then calculate how much each of the workers would gain if the workers became unionized and define the union wage gain as

$$\text{Union wage gain} = \frac{\sum_{i=1}^{k} \Delta_i}{k}$$

The union wage gain thus measures what the average worker in the economy would gain (in percentage terms) if they suddenly became a union member. Although we are interested in knowing the size of the union wage gain, this statistic is very difficult to calculate. After all, we need to know how much the worker would earn if he were employed in a nonunion job and how much he would make if the job suddenly became unionized. Typically, we observe only one of these two wages (that is, either the job is unionized or it is not). As a result, we instead calculate a very different sort of union-nonunion wage differential.

In particular, suppose that w_U gives the average wage in union jobs and the average wage in nonunion jobs is given by w_N. The union wage gap is then defined by

$$D = \frac{\overline{w}_U - \overline{w}_N}{\overline{w}_N}$$

which is the percent wage differential between union jobs and non-union jobs. Estimates of the union wage gap typically adjust for differences in socioeconomic characteristics (such as education, age, industry, and region of employment) between workers in union jobs and workers in non-union jobs.

Unions and Wage Dispersion

The wage distribution of unionized workers has less dispersion than that of nonunion workers. The evidence suggests that wage dispersion in union firms is about 25 percent lower than in non-union firms. The evidence also indicates that unionization reduces wage dispersion in the aggregate economy by 10 percent.

The “compression” of the wage distribution in the union sector arises partly because the union workers are a more homogeneous group (in terms of education and other observable skill measures) than those non-union workers. Unionized firms, however, also offers their workers a lower payoff for skills than non-union firms. The rate of return to education among nonunion workers is perhaps twice as high as that of union workers. The lower payoff to skills found in union firms might occur because unions stress pay equity considerations in collective bargaining negotiations. These considerations prohibit employers from making wage-setting decisions that reward very productive workers and penalize the less productive workers. There is also evidence

that unions flatten the age-earnings profile, partly because thereseem to be fewer training opportunities in the union sector. Union workers spend about 4.2 hours per week on-job-training activities compared to 6.1 hours per week for comparable job training to nonunion workers because the rigid union rules specifying how and when workers might be used in the production process reduce the profitability of training, vacation and sick days, pensions, and bonuses. The ratio of the value of fringe benefits to the wage is 20 percent in unionized firms and only 15 percent in non-union firms. Because union wages are higher than non-union wages, the package of fringe benefits received by union workers is worth more than the package received by nonunion workers. As a result, the union effect on *total* compensation (the wage plus the dollar value of fringe benefits) exceeds the union wage effects we discussed in this chapter. The evidence suggests that the "union compensation gap" (that is, the percent difference in total compensation between workers in union and non-union jobs) may be about 2 to 3 percentage points higher than the union wage gap

Nonwage Effects of Unions

Although much of the literature focuses on the impact unions have on the wage structure, unions influence many other aspects of the employment relationship, including the worker's productivity, labor turnover, and job satisfaction. One important channel through which the unions extend their influence is known as the exit-voice hypothesis. In the absence of unions, workers do not have an established mechanism for informing employers of grievances regarding working conditions, wages, or other aspects of the employment relationship. If a single worker were to file a complaint, the employer might respond by demoting or firing the said worker. The only way that non-union workers can typically register their dissatisfaction is through "exit"— where they vote with their feet and leave the firm.

Unions give workers a formal channel to express their grievances. The union, in effect, acts as an agent for the workers and provide the workers with a "voice." Workers who are unsatisfied with the job can let the union pass on the information to the employer without fear of employer reprisals. Part of the lower quit rate in unionized firms is because union workers earn high wages and have little incentive to quit even in the absence of a voice mechanism. However, it turns out that even after carefully controlling for differences in the value of the union and non-union compensation packages, union workers are still much less likely to quit.

The exit-voice mechanism influences the job satisfaction of union members. Surprisingly, many studies have shown that union members report being *less* satisfied with their jobs than non-union members. This finding might seem to contradict the exit-voice hypothesis. After all, the influential voice provided by unions should remedy many of the workers' grievances. However, for unions to be effective, the workers' voices must be heard "loud and clear." A by-product of unionization, therefore, might well be the politicization of the workforce. Union members would then be expected to express less job satisfaction than non-union members. Note, however, that the dissatisfaction is

not genuine because it does not lead to more quits. Instead, it is a device through which the unions can tell the firm that its workers are unhappy and want more.

Unions, Productivity, and Profits

The greater employment stability in unionized firms provides a channel through which unions can have a favorable impact on the firm's productivity. Labor turnover, after all, is quite costly. It disrupts the production process, requires substantial expenditure in headhunting activities, and increases the cost of training the workforce. The exit-voice hypothesis, therefore, implies that the union could increase the productivity of unionized firms. This controversial implication has received a great deal of attention. Overall, the evidence seems to indicate that workers in unionized firms are indeed more productive. A careful study of productivity in the concrete industry, for instance, reports that the productivity of workers in unionized firms is about 9 percent higher than the productivity of workers in nonunion firms.

In one sense, we should not be too surprised to find that unionized firms are more productive. After all, if firms move up the demand curve due to the union wage increase, employment falls, and the value of the marginal product of labor rises. Moreover, the union wage increase may "shock" the firm into more diligent hiring practices. Because unions often impose restrictive rules on the dismissal of their members, unionized firms will be much more selective in their hiring decisions, and a better-screened workforce will typically be more productive. However, the favorable impact of unions on productivity is not sufficiently large to compensate the firm for its higher payroll costs. As a result, unionized firms have lower profits.

Collective Bargaining Agreement (CBA)

Negotiation, through collective bargaining, in the fixing the wage rates and terms and working conditions in the labor market has been customary and widely practiced in every industry. Collective Bargaining Agreement (CBA) refers to a contract executed upon request of either the employer or the exclusive bargaining representative of the employees – incorporating the agreement reached after negotiations with respect to wages, hours of work, and all other terms and conditions of employment, including proposals for adjusting any grievances or questions under such agreement. The CBA is the law between the contracting parties and the Collective Bargaining representative and the employer-company. Compliance with a CBA is mandated by the expressed policy to give protection to labor and the unilateral changes in the implementation of the provisions of the CBA cannot be allowed without the consent of both contracting parties. The goal of collective bargaining is the making of agreements that will stabilize business conditions and fix fair standards of working conditions.

ACTIVITY

Answer the following questions:

1. What does it mean to say that a union has a utility function? How exactly is this utility function derived from the preferences of the workers?

2. How employers “choose” the optimal length of a strike in a model where there is asymmetric information?

3. A is a worker in Company Y. He is a non-union worker. The collective bargaining union was able to secure in their CBA, company profit share and other incentives not dependent to profits. Will this affect A, a non-union member?

4. True or False: Strike is illegal. Explain.

5. Soon after the football season ended in 2019, the Philippine Volleyball Association (PVA), which is the union for the players in the Volleyball Players, and the team owners (the PVA) experienced a labor impasse in the form of a lockout. For the record, each year about 150 players (called rookies) enter the PVA and 150 exit the league (via retirement or not making a team roster). While renegotiating the labor settlement, the union took several stances. Explain why a union of players would advocate against:

    a. Expanding the number of games played.
    b. Expanding the size of team rosters.
    c. A team salary cap.
    d. A rookie salary cap.

LESSON 7

GOVERNMENT, GOVERNMENT LEGISLATIONS AND THE LABOR MARKET

INTRODUCTION

Employee when used with reference to a person in the public service, includes any person in the service of the government or any of its agencies, divisions, subdivisions or instrumentalities, or commonly known as government employee. In the Philippines, their status, salaries, benefits and conduct governed by the different existing laws such as the Administrative Code of the Philippines and its implementing Rules and Regulations (IRR), Civil Service Law, RA No. 6758 and the like. Aside from the workers in the private sectors, government employees play vital role in the economic building of a nation. In this, we will into the extent and growth of government employment and its impact to the labor market.

LEARNING OBJECTIVES

1. Analyze the importance of the government and government legislation.
2. Demonstrate the effects of government spending and taxes to labor market.

PRESENTATION/DISCUSSION OF THE LESSON

Main Aspects of Wage Setting in the Government Sector

a. The government as an employer

The government has been for long the single largest employer in any developed economy. The long-term expansion of the government both in terms of expenditure and employment has been more on account of an expansion of the welfare state. Many of the government jobs are comparable to private sector ones and, as it is the case in some countries, some of those services can indeed be supplied by private suppliers even if heavily funded by the government, with education and health services being among the finest examples. Thus, in the presence of activities that may be performed both by public and private employees, spillovers linked to mobility between the two sectors are likely to occur. Moreover, for a number of reasons, the government as an employer is different than a private company.

First, the government supplies a very particular type of goods and services. The provision of public goods (including sovereignty tasks like defense, public order, judiciary, or regulation) or of merit goods takes usually place in a monopolistic regime with little room for market based competition. For this reason, the elasticity of demand for government services is likely to be low, which also implies a relatively low wage elasticity of labor demand.

Second, the objectives, incentives and constraints faced by decision makers in the government sector make the government a "one-of-a-kind" employer. Whilst the objective of a market-based employer is profit maximization, politicians and bureaucrats may have a different objective function like the maximization of social welfare (Gregory and Borland, 1999; Forni and Giordano, 2003) or that of maximizing the chances of being reelected (Alesina et al, 2001) or the amount of resources under the control of bureaucracies (e.g., Buchanan and Tullock, 1958). Also the constraints faced by public wage-setters are different: whereas market-based employers and decision makers are constrained by demand for the service they supply, politicians and bureaucrats may decide on the levels of government service provision, thereby affecting government labor demand directly, but are constrained by the government's fiscal space.

Third, the government is likely to exert a strong influence on private sector not only in light of its sheer size as employer, but also because it acts as a legislator on the framework conditions under which labor relations occur, including wage setting. It can also impact on overall wage developments in the broad economy with a direct role when it comes to setting the statutory minimum wage and to promoting tripartite agreements or other kind of agreements against which actual wage decisions are taken in the private as well as in the government sector.

Wage Determination

Wage determination in the government sector can differ substantially from standard bargaining in the private sector. This is not only because the government is a different type of employer, but also because the union structure and the institutional environment in which wage setting occurs do differ from those of the private sector. Moreover, the government employment relationship can differ from that of private sector employees. In the Philippines, salaries of government employees are generally governed by the Salary Standardization Law which provide for standardized and rationalized compensation across all government agencies and to provide a generally competitive compensation with those of the public sector. This is to attract, retain and motivate a corps of competent and dedicated civil servants.

Based on the recent report by the Philippine Statistics Authority (PSA), those working in government and government-controlled corporations shared 9.2 percent in July 2020 compared to 9.0 percent in the same month of 2019 or about 0.2 percent increase in the employment rate in the public sector.

Labor market effects of government spending

Public spending on labor market programs includes public employment services (PES), training, hiring subsidies and direct job creations in the public sector, as well as unemployment benefits. It includes placement and related services, benefit administration and other expenditure. Training includes institutional, workplace and alternate/integrated training, as well as special support for apprenticeship. Employment incentives includes recruitment incentives, employment maintenance incentives, and job

rotation and job sharing. Out-of-work income maintenance and support includes full unemployment benefits, unemployment insurance, unemployment assistance, partial unemployment benefits, part-time unemployment benefits, redundancy and bankruptcy compensation. Policymakers sometimes view the expansion of public employment as a useful tool to reduce high unemployment although creation of public jobs has an ambiguous impact on unemployment. If private employment and the labor force are given, an additional public job would reduce unemployment. However, public employment can also affect unemployment indirectly, through private employment and labor-force participation. In the result of a study conducted by the International Monetary Fund (IMF), it confirmed that public employment does play a significant role in the medium-to long-term performance of the labor market. It does not support the hypothesis that creation of public jobs reduces unemployment. However, the results provide some evidence that creation of public-sector jobs destroys private-sector jobs. While the magnitude of the impact of public employment on private employment varies depending on the model specification, its impact increases with the degree of substitutability between public and private production and the size of job compensation in the public sector. Public employment affects private employment through the following channels: (i) increase in public employment in an environment of higher public sector rents increases expected returns on looking for a job in the public sector which attracts workers into the public sector at the cost of the private sector and increases wage pressure and decreases private employment; and (ii) increase in public employment—where public sector production is substitutable to the private sector production—puts competitive pressure on the private sector and the relative price of goods produced by the private sector decreases, negatively influencing the wages and participation rate in the private sector. This suggests that reforms aimed at reducing the rents and the size of the public employment may improve labor market performance and policymakers should avoid using public employment as a tool for reducing unemployment in the medium-to long-run.

Labor market and Taxes

The government, through the imposition of taxes, affect the labor market. An income tax means that the amount paid by the employer exceeds the amount received by the worker. Imposition of income tax gives rise to a deadweight loss and because of this, workers will choose not to work or work fewer hour. Because labor market is important to the economy and because the income tax, in most economies, is a major source of revenue for the government, economists and politicians pay a lot of attention to this market. In Figure 7.1 summarizes the effects of a tax on wages. When there is a tax on wages, there is a gap between the wage paid by the firm and the wage received by the worker. As shown in the figure, the effect of the tax is to reduce the quantity of labor traded. The wage paid by the firm is higher than the wage in the original equilibrium, and the wage received by the worker is less than the wage in the original equilibrium.

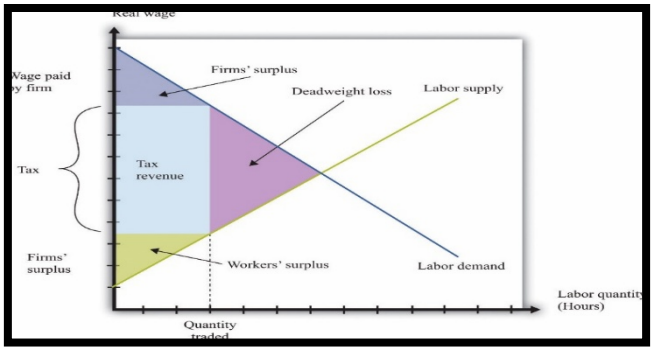

Figure 7.1 The Effect of an Income Tax in the Labor Market

The incidence of the tax will depend on the elasticity of labor supply and labor demand. If the wage paid by the firm increases by the amount of the tax, then the firm is paying the tax. This will happen if the demand for labor is very inelastic. If the wage received by the worker decreases by the amount of the tax, then the worker is paying the tax, not the firm. This will happen if the supply of labor is very inelastic.

ACTIVITY

1. Republic Act No. 10963 or Tax Reform for Acceleration and Inclusion (TRAIN) which took effect on 2018, provide for a new graduated rate for income tax. What do you think will be the effect of such law to the current NCR's minimum wage? Explain.

2. Explain the reason behind the increase in the number of Filipino's working in the public sector.

3. Does employees in the public sector entitled to the benefits granted by the Labor Code such as Service Incentive Leave, Night Differential, and Holiday Pay etc.? Explain.

LESSON 8

WAGE STRUCTURE

INTRODUCTION

The laws of supply and demand determine the structure of wages in the labor market. There is bound to be some inequality in the allocation of rewards among workers. Some workers will typically command much higher earnings than others. In the end, the observed wage dispersion reflects two “fundamentals” of the labor market. First, there exist productivity differences among workers. The greater these productivity differences, the more unequal the wage distribution will be. Second, the rate of return to skills will vary across labor markets and over time, responding to changes in the supply and demand for skills. The greater the rewards for skills, the greater the wage gap between skilled and unskilled workers, and the more unequal the distribution of income. This chapter examines the factors that determine the shape of the wage distribution. In all industrialized labor markets, the wage distribution exhibits a long tail at the top end of the distribution. In other words, a few workers get a very large share of the rewards distributed by the labor market.

This chapter concludes by showing how wage differentials among workers can persist from generation to generation. Because parents care about the well-being of their children, many parents will make substantial investments in their children’s human capital. These investments induce a positive correlation between the earnings of parents and the earnings of children, ensuring that part of the wage dispersion observed in the current generation will be preserved into the next.

LEARNING OBJECTIVES

1. Identify the different wage structure.
2. Explain the factors affecting wage differentials.

PRESENTATION/DISCUSSION OF THE LESSON

Minimum Wage

Wage is defined as remuneration or earnings, however, designated capable of being expressed in terms of money, whether fixed or ascertained on time, task, piece, commission basis, or other methods of calculating the same. It is payable by the employer to an employee under a written or unwritten employment contract, for work done or to be done; or for services rendered or to be rendered. This includes the fair and reasonable value of facilities furnished by the employer to the employee while allowances are excluded from the basic salary or wage computation. All employees are entitled to receive except those working under farm tenancy or leasehold, household or domestic helpers, including family drivers and other persons in the personal service of another, homeworkers engaged in needlework, workers in registered cottage industries who

work at home, workers in registered cooperatives when so recommended by the Bureau of Cooperative Development upon approval of the Secretary of Labor.

In line with this, Republic Act 6727 or the Minimum Wage Law is enacted. “Statutory minimum wage” is the lowest wage fixed by law that an employer can pay his workers. The Philippines has daily minimum wage rates that vary from region to region, ranging from P350.00 to P645.00 a day for 2024. In the National Capital Region (NCR), the minimum wage rate is P645.00 in non- agriculture and P608.00 in agriculture, both for plantation and non-plantation.

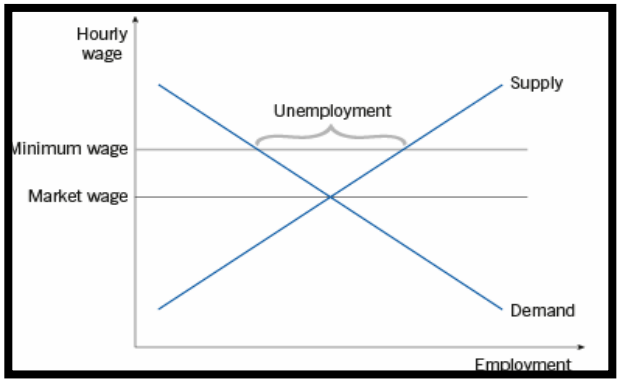

Figure 8.1. Impact of Minimum Wage to the Labor Market

With the imposition of minimum wage in the competitive labor market, there has been an increase in the wage rates of workers. With this, the quantity of labor being demanded by firms decreases because they need to absorb the additional cost of paying wages to workers. On the other hand, the quantity supplied increases since an increase in wages increases income. There will be constrained supply because workers will not supply labor beyond the minimum wage. The difference between the new quantity supplied and the new quantity demanded results to surplus or unemployment.

Why unemployment happens when minimum wage is imposed?

1. Firms absorbed additional cost of paying wages to employees.
2. Wage increases but the productivity does not increase.
3. Labor has other substitute.
4. Elasticity of demand- if demand is relative elastic, the imposition of minimum wage will increase the numbers of workers who are unemployed.

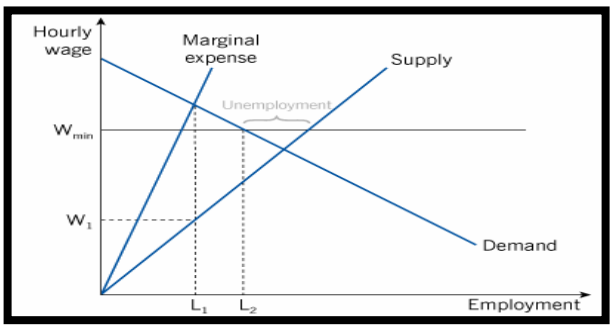

Figure 8.2. Impact of Minimum Wage to the Monopsony Labor Market

In a monopsony, the imposition of minimum wage leads to an increase in the wage rate and in the quantity of labor employed in the labor market. Reducing the numbers of individual who are unemployed in the market.

Earnings Distribution and Human Capital

Wage differential is defined as the difference in earnings between similarly skilled workers within various industries or locations. This also refers to the pay difference between various levels of experienced workers in the same industry or locations. It occurs due to human capital investment and age differences- as young workers are still accumulation capital while the older ones are collecting returns from their investment. Human Capital refers to the productive investment embodied in human process including skills, abilities, ideas, health and location, resulting from the expenditures resulting from education, on-the-job trainings and medical care. It includes the investment of the government of the government and private individuals. Because it is assumed that investment in human capital yields higher social and private benefits, developing countries such as the Philippines prioritizes education, and it has been evident with how the government allocates large chunk of its budget in the Annual General Appropriation Act (GAA) to education sector.

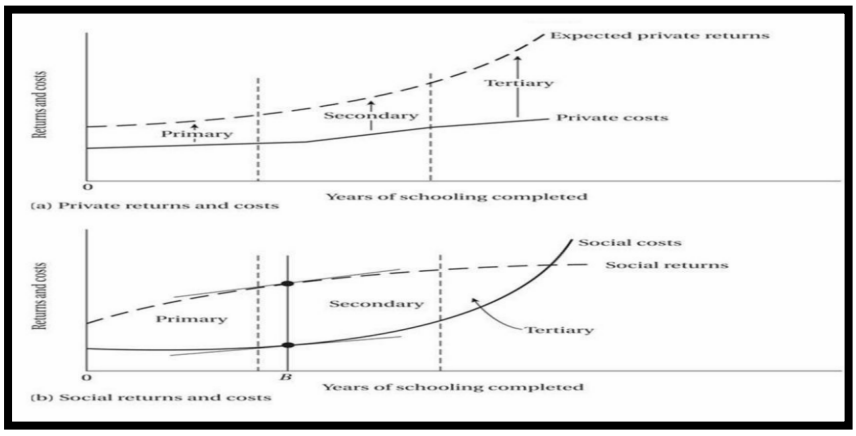

Figure 8.3. Private versus Social Benefits and Costs of Education

Private cost includes direct and indirect cost of attending education. Direct cost includes the out-of-pocket expenses of an individual such as tuition fees, books, transportation fees while indirect costs is consists of opportunity cost of attending school such as the forgone earning. As presented in Figure 8.3, as years of schooling progresses, expectation to private returns increases, together with the private costs. Further, social costs borne by both the individual and society from private education

decisions increases together with social return. However, social benefit decline overtime relatives to the increase to social cost. Therefore, the rate of return is now negative.

The human capital model also provides an interesting explanation for the schooling decision of individuals. Recall that a worker invests in human capital up to the point where the marginal rate of return to the investment equals the rate of discount. This stopping rule generates a positively skewed wage distribution even if the distribution of ability in the population is symmetric. To illustrate, suppose that a third of the workforce is composed of low-ability workers, a third is composed of medium-ability workers, and the remaining third is composed of high-ability workers. Furthermore, suppose all workers have the same rate of discount.

Figure 8.4 illustrates the investment decision for workers in each of the ability groups. The curve MRR L gives the marginal rate of return schedule for low-ability workers. This group will acquire H_L efficiency units of human capital. Similarly, the curve MRR * gives the schedule for medium-ability workers, who acquire H * units; and the curve MRR_H gives the schedule for high-ability workers, who acquire H_H units. High-ability workers, therefore, have higher wages than low-ability workers for two distinct reasons. First, high ability workers would earn more than low-ability workers even if both groups acquired the same amount of human capital. After all, ability is itself a characteristic that increases productivity and earnings. High-ability workers also earn more because they acquire more human capital than less able workers. Put differently, the positive correlation between ability and human capital investments “stretches out” wages in the population, generating a positively skewed distribution.

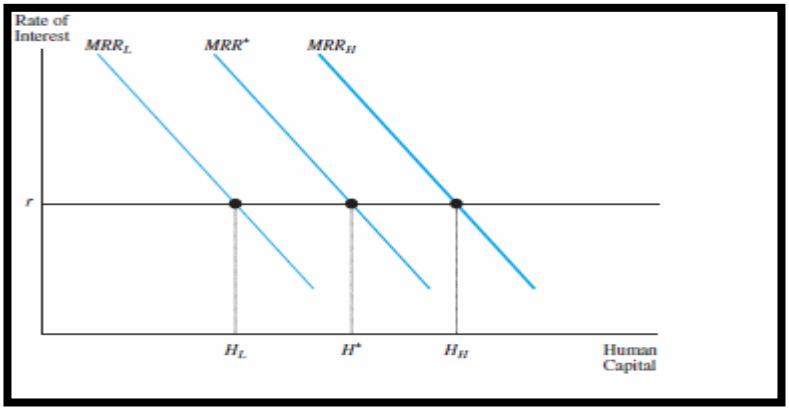

Figure 8.4 **Human Capital Investment Decision for Workers**

Measuring Inequality

There are several ways of measuring the extent of inequality in an income distribution. Many of the measures are based on calculations of how much income goes to particular segments of the distribution. To illustrate, consider an extreme example. Suppose we rank all households according to their income level, from lowest to highest.

Let's now break the population of households into five groups of equal size. The first quintile contains the 20 percent of the households with the lowest incomes and the fifth quintile contains the 20 percent of the households with the highest incomes. We can now calculate how much income accrues to households in each quintile. If every household in this example earned the same income—so that there were perfect income equality—it would be the case that 20 percent of the income accrues to the first quintile, 20 percent of the income accrues to the second quintile, 20 percent of the income accrues to the third quintile, and so on. We can summarize these data graphically by relating the cumulative share of income accruing to the various groups. In the case of perfect equality, the result would be the straight line AB in Figure 8.5. This line indicates that 20 percent of the income accrues to the bottom 20 percent of the households; 40 percent of the income accrues to the bottom 40 percent of the households; 60 percent of the income accrues to the bottom 60 percent of the households. The line AB is called a Lorenz curve; it reports the cumulative share of the income accruing to the various quintiles of households. The "perfect-equality" Lorenz curve must be a straight line with a 45 degrees angle.

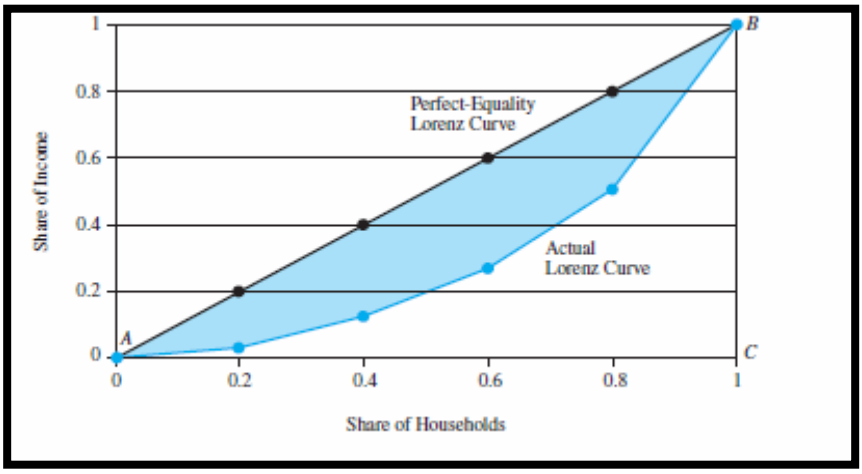

Figure 8.5 Lorenz Curve

Figure 8.5. The "perfect-equality" Lorenz curve is given by the line *AB,* indicating that each quintile of households gets 20 percent of aggregate income, while the Lorenz curve describing the actual income distribution lies below it. The ratio of the shaded area to the area in the triangle *ABC* gives the Gini coefficient. Figure 8.5 also illustrates the Lorenz curve derived from the actual distribution of household income. This Lorenz curve lies below the perfect-equality Lorenz curve. In fact, the construction of the Lorenz curve suggests that the more inequality in an income distribution, the further away the actual Lorenz curve will be from the 45 _ line. To illustrate, consider a world in which all income accrues to the fifth quintile, the top fifth of the households. In this world of "perfect inequality," the Lorenz curve would look like a mirror image of the letter L; it would lie flat along the horizontal axis, so that 0 percent of the income accrues to 80 percent of the households and then shoot up so that 100 percent of the income accrues to 100 percent of the households. The intuition behind the construction of the Lorenz

curve suggests that the area between the perfect-equality Lorenz curve and the actual Lorenz curve can be used to measure inequality. The Gini coefficient is defined as

$$\text{Gini coefficient} = \frac{\text{Area between perfect–equality Lorenz curve and actual Lorenz curve}}{\text{Area under perfect–equality Lorenz curve}}$$

In terms of Figure 8.5, the Gini coefficient is given by the ratio of the shaded area to the triangle given by *ABC.* This definition implies that the Gini coefficient would be 0 when the actual distribution of income exhibits perfect equality and would equal 1 when the distribution of income exhibits perfect inequality (that is, when all income goes to the highest quintile).

Although an increase in the Gini coefficient represents an increase in income inequality, there are subtleties that are being overlooked by summarizing the entire shape of the income distribution into a single number. Consider, for example, the impact of a shift in income from the bottom quintile to the top quintile. This shift obviously increases the Gini coefficient. It turns out that we can obtain a similar numerical increase in the Gini coefficient by transferring some amount of income from, say, the second and third quintiles to the top quintile. Although the numerical increase in the Gini coefficient is the same, the two redistributions are not identical.

Because of this ambiguity, many studies use additional measures of inequality. Two commonly used measures are the 90-10 wage gap and the 50-10 wage gap. The 90 10 wage gap gives the percent wage differential between the worker at the 90th percentile of the income distribution and the worker at the 10th percentile. The 90-10 wage gap thus provides a measure of the range of the income distribution. The 50-10 wage gap gives the percent wage differential between the worker at the 50th percentile and the worker at the 10th percentile. The 50-10 wage gap thus provides a measure of inequality between the “middle class” and low-income workers.

ACTIVITY

1. What effect will each of the following proposed changes have on wage inequality?
   a. Indexing the minimum wage to inflation.
   b. Increasing the benefit level paid to welfare recipients.

2. Explain why is the wage distribution positively skewed?

3. How will you calculate a Gini coefficient? What is its significance?

UNIT III

LESSON 9

LABOR PRODUCTIVITY AND LABOR'S SHARE OF NATIONAL INCOME

INTRODUCTION

Labor productivity has been defined as the value that each employed person creates per unit of their input. It has been an important economic indicator that is closely linked to economic growth, competitiveness, and living standards within an economy which is measured by the total volume of output- measured in terms of Gross Domestic Product (GDP) produced per unit of labor (measured concerning the number of persons employed) during a given time reference period. This provides general information on the efficiency and quality of human capital in the production process for a given economic and social context, including other complementary inputs and innovations used in production. It is calculated as:

$$\textbf{Labor productivity} = \frac{\textbf{GDP at constant prices}}{\textbf{Number of employed persons}}$$

Workers' productivity can be determined by different factors such as human capital, technological change, and economies of scale. **Human capital** is the accumulated knowledge from education and experience, skills, and expertise that the average worker in an economy possesses - the higher the average level of education in an economy, the higher the accumulated human capital and labor productivity. **Technological change** is a combination of **invention**—an advancement in knowledge—and **innovation**, which is putting that advance to use in a new product or service. Economies of scale, on the other hand, is the cost advantages that industries obtain due to size.

LEARNING OBJECTIVES

1. Demonstrate the different concept of measuring labor productivity and discuss how to compute it.
2. Examine the economic implications of labor productivity.
3. Interpret the relationship of productivity and employment.
4. Analyze how the total output of an economy is being measured.
5. Explain the different approaches of Gross Domestic Product and discuss how to compute it.

PRESENTATION/DISCUSSION OF THE LESSON

Impact of Labor Productivity on the economy

In the labor market, an increase in labor productivity increases the demand for labor. With no change in the supply of labor, the real wage rate rises, and an aggregate hour increases. And as the aggregate hours increase, the potential GDP increases. Thus, labor productivity ultimately causes real GDP economic growth to increase.

Impact of Labor Productivity to the economy

In the labor market, an increase in labor productivity increases the demand for labor. With no change in the supply of labor, the real wage rate rises, and an aggregate hour increases.

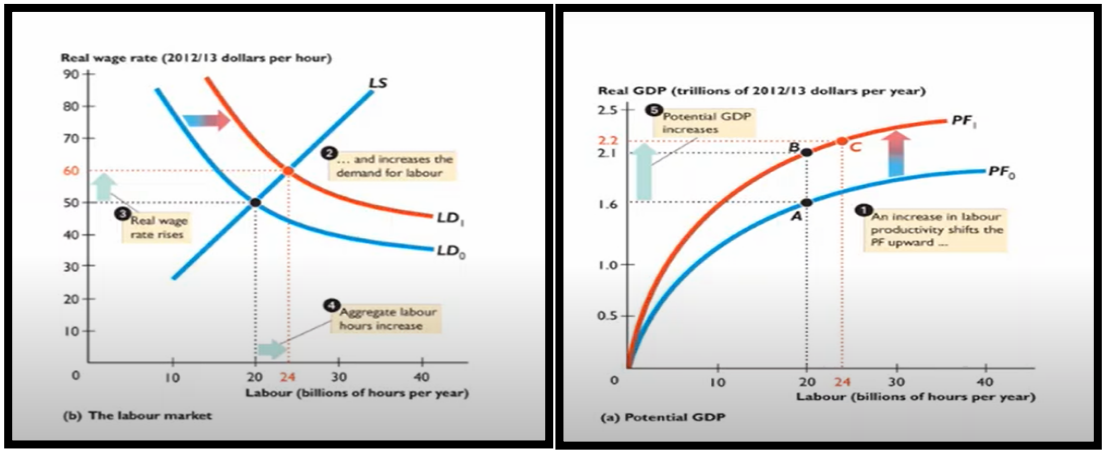

Figure 9.1 Impact of Increase in Labor Demand to RGDP

Further, as the aggregate hours increase, the potential GDP increases. Thus, labor productivity ultimately causes real GDP economic growth to increase.

Employment and productivity

Productivity and employment are key issues for policy makers, but ones in which the role of firms is only partially understood. Evidence shows that even within a narrowly defined sector, there can be great heterogeneity in firms' contribution to employment creation and productivity. Increasing labor productivity enables an industry or economy to produce the same amount or more output with fewer workers. Because labor productivity is directly related to output, as it has a significant impact on economic growth and the standard of living.

A Working Paper by William Nordhaus investigates the productivity rebound and the relationship between productivity growth and employment in manufacturing. In The Sources of the Productivity Rebound and the Manufacturing Employment Puzzle, Nordhaus looks at detailed industrial productivity and employment data for almost 60 years, focusing on the U.S. productivity renaissance since 1995.

For individual companies or industries, a higher productivity growth may lead to a job loss, Nordhaus says, citing the example of the decline in employment in the typewriter manufacturing sector following the advent of the personal computer. But from the perspective of manufacturing or major manufacturing industries, the lower prices resulting from higher productivity have increased demand growth and more than offset the employment-lowering effect of higher productivity.

According to Nordhaus, it appears that the reason for the lower manufacturing employment over the last decade is not due to higher productivity growth in the United States. Instead, the source is likely to be the higher productivity growth and the price declines among foreign manufacturers that compete with U.S. companies. In China, productivity has been rising, and costs have been declining more rapidly than in the United States - particularly in industries like consumer electronics and apparel, where China did not compete with the United States two decades ago.

Labor's share of national Income

Labor's share of national income is defined as the amount of GDP paid out in wages, salaries, and benefits. Since the 1980s, it has been declining in developed and, to a lesser extent, emerging economies. This has raised concerns about slowing income growth, inequality, and loss of the consumer purchasing power needed to fuel demand in the economy. The decline has been much discussed, and the rising power of companies vis-à-vis workers—whether from new technology, globalization, the hollowing out of labor unions, or market consolidation—has shaped much of that discussion.

A study of the Asian Development Bank finds evidence that the labor income share varies considerably across economies, and it has generally declined over time, especially in the last three decades. On a socio-political level, this trend risks creating perceptions that workers are not receiving 'fair' shares of the income they produce, thus threatening socio-political stability (Atkinson 2009). On an economic level, it may risk jeopardizing the sustainability of future economic growth by constraining wage-based household consumption (Onaran and Galanis 2013). These issues are even more significant in light of the negative repercussions on labor markets caused by the global financial crisis and its slow recovery in many parts of the world (Smeeding and Thompson 2011).

To compute labor share of income:

$$\textbf{Labor share of Income} = \frac{\textbf{All wages paid to all Labor}}{\textbf{Output}}$$

Functional Distribution of income

The functional distribution of income distinguishes the shares that different types of income represent in total income. Although several other decompositions may be interesting, the most common distinction is between labor and capital shares. It explains

the share of total national income received by each factor of production and relates it to the distribution of rewards for the services of the factors of production such as rent, wages, interest, and profit are the rewards for the services of land, labor, capital, and organization respectively. Thus, functional distribution studies the forces underlying the determination of the prices and shares of the various factors of production.

According to Jan Pen**,** people are no longer concerned with individuals and their incomes in functional distribution, but with factors of production: labor, capital, land, and something else that may best be called 'entrepreneurial activity.' The theory examines how these factors of production are remunerated. It is primarily concerned with the price of a unit of labor, capital, and land and is, therefore, an extension of price theory. It is sometimes called the theory of factor prices.

Theories of Functional Shares

From a historical perspective, the earliest form of functional income distribution theory –in its most formalized and advanced form– is found in the works of David Ricardo. In the first paragraph of the preface to his magisterial work, Ricardo spells out the main scope of his inquiry as "to determine the laws which regulate this distribution (between rent, profit, and wages) as the principal problem in Political Economy." Ricardo states that the whole "produce of the earth" is divided by paying rent first, following the principle of decreasing marginal productivity (here, of land). According to Ricardo, the most productive acres of land are put in use first so that through time only the less productive acres remain –and the best acres are the priciest. The distribution between the remaining wages and profits is then made. Contrary to his marginalist followers, Ricardo does not apply the concept of decreasing marginal productivity to labor and capital. Instead, Ricardo proposes a reformulation of his friend Malthus's principle of population: workers will multiply so much, making the wage bill grow faster than profits. As a result, the share of profit is bound to decrease in time, leading to a situation Ricardo called the stationary state: with profits being squeezed out of the system, capitalists would have no incentives to expand their activity, and economic growth will come to an end.

On the other hand, the non-classical approaches focus on heterodox, despite being loosely referred to as "Keynesian", for Keynes said very little on income distribution. Indeed, Keynes starts by assuming that: The real wage is equal to the marginal product of labor. However, this is subject to the qualification that equality may be disturbed, under certain principles, if competition and markets are imperfect. According to Keynes, the inequitable distribution of wealth and income is one of the outstanding faults of the economic society in which we live. He also assumes income distribution to be constant through much of his work.

ACTIVITY

1. From a recent report by a concerned national agency, it was found out that there is low labor productivity of country X. How can the country improve its labor productivity?

2. Country X's population is composed of 200 people where 100 are part of the workforce. Its GDP is P5,000. Due to a series of bombings and terrorist attacks to country B, 25 refugees went to Country A and were all allowed to work. Because of this, the GDP of Country A increased by P500. Compute labor productivity. Is there a change in labor productivity? Explain.

CHAPTER 10

UNEMPLOYMENT, WAGES AND INFLATION

INTRODUCTION

The Labor Force Survey (LFS) defines an employed person as anyone aged 16, or over, who has completed at least one hour of work in the period being measured, or are temporarily away from his or her job, such as being on holiday. The number of people in employment is not the same as the number of jobs given that some people have more than one job. As defined, the Employment rate is the proportion of employed persons to the total labor force. While those who are unemployed consist of persons in the labor force who are reported as (1) without work; and (2) currently available for work; and (3) seeking work or not seeking work because of the belief that no work is available, or awaiting results of previous job application, or because of temporary illness or disability, bad weather or waiting for rehire or job recall. It is difficult to understand the existence and persistence of large pools of unemployed workers in terms of the typical model of supply and demand unless (1) firms pay wages that are above the equilibrium level and there is an excess supply of labor and (2) wages are “sticky” and cannot be driven down to the equilibrium level. Workers are unemployed for many reasons, and policymakers usually worry more about some types of unemployment than about other classes. At any time, for instance, many persons are “in between” jobs. They have either quit or been laid off, or they have just entered (or re-entered) the labor market. It takes time to learn about and locate available job opportunities. Therefore, even a well-functioning market economy, where the number of available jobs equals the number of persons looking for work, will exhibit some unemployment as workers search for jobs. Put differently, the equilibrium level of unemployment will not be zero.

This chapter shows how job search activities generate unemployment in a competitive economy and identifies some of the factors that can prevent the market from clearing— even after job search activities are accounted for.

LEARNING OBJECTIVES

1. Classify the different types of unemployment.
2. Demonstrate the different theories of unemployment.
3. Explain the implications of public policies in unemployment.
4. Define and explain the importance of wages and inflation in economy.
5. Explain the relationship of wage and inflation using different theories.

PRESENTATION/DISCUSSION OF THE LESSON

Types of Unemployment

The labor market is in constant flux. Some workers quit their jobs while other workers were laid off. Some firms are cutting back; other firms are expanding. New workers enter the market after completing their education, and other workers reenter after spending some time in the nonmarket sector. At any time, therefore, many workers are in between jobs. If workers who looks for jobs and firms who's looking for workers could find each other immediately, there would be no unemployment. Frictional unemployment arises because both workers and firms need time to locate each other

and digest the information about the value of the job match. The existence of frictional unemployment does not suggest a fundamental structural problem in the economy, such as an imbalance between the number of workers looking for work and the number of jobs available. As a result, frictional unemployment is not viewed with alarm by policymakers. By its very nature, frictional unemployment leads to short unemployment spells. Moreover, frictional unemployment is "productive" because the search activities of workers and firms improve the allocation of resources.

There are also easy policy solutions for reducing frictional unemployment, such as providing workers with information about job openings and providing firms with information about unemployed workers.

Many workers also experience seasonal unemployment. Workers in both the garment and the auto industries are laid off regularly because new models are introduced with clockwork regularity, and firms shut down so that they can be retooled. Spells of seasonal unemployment are usually very predictable. As a result, seasonal unemployment, like frictional unemployment, is not what the unemployment problem is about. After all, most unemployed workers will return to their former employer once the employment season starts.

The type of unemployment that causes the most concern is structural unemployment. Suppose the number of workers looking for work, equals the number of jobs available; there is no imbalance between the numbers being supplied and demanded. Structural unemployment can still arise if the persons looking for work do not "fit" the jobs available. At any time, some sectors of the economy are growing, and other sectors are declining. If the skills were perfectly transferable across industries, the laid-off workers could quickly move to the growing sectors. Skills, however, might be specific to the worker's job or industry, and laid-off workers lack the needed qualifications in the expanding sector. As a result, the unemployment spells of the displaced workers might last for a long time because they must retool their skills. Structural unemployment arises because of a mismatch between the skills that workers supply and the skills that firms are demanding.

The policy prescriptions for this type of structural unemployment are different from those that would reduce frictional or seasonal unemployment. The problem is skills - the unemployed are stuck with human capital that is no longer useful. To lessen this type of unemployment, the government would have to come up with training programs that would "inject" the displaced workers with the types of skills now in demand.

There may also be a structural imbalance between the number of workers looking for jobs and the number of available jobs—even if the skills were perfectly portable across sectors. This imbalance may arise because the economy has moved into a recession. Firms now require a smaller workforce to satisfy the decreasing consumer demand, and employers lay off many workers, generating cyclical unemployment. There is an excess supply of workers, and the market does not clear because the wage is sticky and cannot adjust downward.

We have already seen that union-mandated wage increases or government-imposed minimum wages introduce rigid wages into the labor market and prevent the market from clearing. As we will see below, economists have developed several models that can generate sticky wages and unemployment even in the absence of minimum wages and unions. The policy prescriptions for cyclical unemployment have little to do with helping workers find jobs or retooling workers' skills. To reduce this type of unemployment, the government will need to stimulate aggregate demand and reestablish market equilibrium at the sticky wage.

Theory of Job search

It states that the level of frictional unemployment is determined by the flows of individual into and out the labor market and the speed with which unemployed individuals find and accept jobs.

A model of Job Search

Due to imperfect information on the job opportunities and workers' characteristics, it takes time and effort to match the unemployed workers with a potential employer. The lower the probability of unemployed workers finding jobs in a period, the higher the expected duration of unemployment and the unemployment rate. Given Pue, it is important to know what can affect it; and to do so, we develop a model with assumptions that:

- Wages(W) are associated with the characteristics of jobs and not characteristics of the individuals.
- Employers differ in the set of minimum hiring standards they use (educational requirements, job training, work experience, performance on hiring)
- The set of attributes/ characteristics can be represented as K.
- Associated with each job as a wage W(K), which means that wage is a function of the required skill levels.
- W is an increasing function of K. Therefore, if two employers use the same K, they will offer the same W.

Different employers have different hiring standards (K). This suggest that there will be a distribution of wage offers associated with job vacancies in the labor market, which is denoted as f(W)- the probability distribution of wage offers were the area of f(W)= 1.

It is presumed that an employee knows the shape of the distribution of wage offers but does not know what each particular firms wage offers or hiring standard will be:

- the job search process will be random visits to firms' employment offices

- Hiring standard or skill level (K) and wages will be highly related as no firm will hire a worker that does not meet its hiring standards.

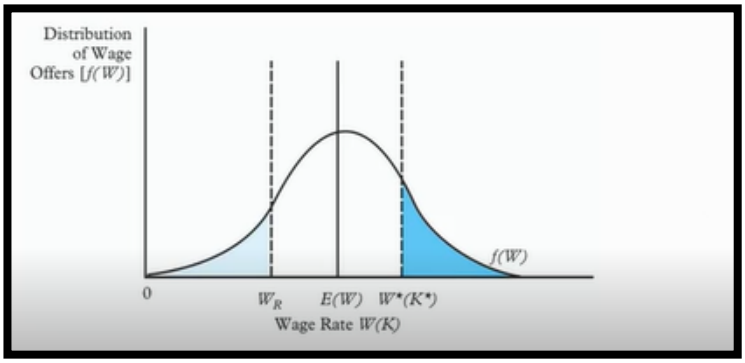

Figure 10.1 Distribution of Wages

If the job market information is imperfect and a firm's hiring standard exceeds K*, a person with the skill level K* is rejected for a job. If the hiring standard is K* or less, the person with a skill level K* is offered the job. Accepting a job offer depends on the number of the individual's reservation wage (WR) as well as the match between K and W within the WR and W*(K*) range.

The Reservation Wage

The reservation wage refers to the value that a worker places on an hour of lost leisure time, that is, it is the wage below which a person will not work.

An individual with skill level K* and whose reservation wage is WR will accept job offers that pay between WR and W*(K*).

The higher the probability of finding a job in the range between WR and (W*K*), the lower the expected duration of unemployment and the expected average wage, E(W), is the weighted average of job offers in the WR and W*(K*) range.

If the choice of WR is much higher than that indicated in the figure:

1. the worker will reject more low-wage jobs, and E(W) would increase
2. Rejecting more job offers decreases the probability of finding a job, thus increasing the expected duration of unemployment.

Natural Rate of Unemployment

The full-employment (or natural) rate of unemployment is difficult to define precisely, and there are several alternative concepts from which to choose. One describes the natural rate of unemployment as that rate at which wage and price inflation are either stable or at acceptable levels. Another defines full employment as the rate of unemployment at which job vacancies equal the number of unemployed workers. Yet, another defines it as the level of unemployment at which any increase in aggregate demand will cause no further reductions in unemployment. A variant of the latter defines the natural rate as the unemployment rate at which all unemployment is voluntary (frictional and perhaps seasonal). Finally, a recent definition of the natural rate is that

rate at which the level of unemployment is unchanging and both the flow into unemployment and the duration of unemployment are normal.

Wages and Inflation

One of the most important aspects of a job for most workers is the wage it pays. Wages allow workers to make a living from their labor. They also provide incentives to be productive and loyal to an employer. In a broader sense, the wages workers earn fuel the economy. Inflation, on the other hand, refers to the rate of change in the average prices of goods and services typically purchased by consumers. There has been an inverse relationship between inflation and unemployment. However, this relationship is more complicated than it appears at first glance, and it has broken down on several occasions. Since inflation and employment (and unemployment) are some of the most closely monitored economic indicators, we'll delve into their relationship and how they affect the overall economy.

When there is high unemployment, the number of people looking for work exceeds the number of available jobs or simply, the supply of labor is greater than the demand for it.

With so many workers available, employers have little need to "bid" for the services of employees by paying them higher wages. When high unemployment rates, wages typically remain stagnant, and wage inflation or rising wages are non-existent. On the contrary, there is low unemployment when the demand for labor by employers exceeds the supply. In such cases, employers need to pay higher wages to attract employees, leading to rising wage inflation.

The Phillips Curve

A.W. Phillipson, his study on the inverse relationship of wage inflation and unemployment discovered that the rate of change of wages could be described by two things: the level of unemployment and the rate of change of unemployment. Phillips hypothesized that if the demand for labor is high, and there are few unemployed workers, employers can be expected to bid wages up rapidly. But when unemployment is high and the demand for labor is low, workers are reluctant to accept lower wages than the prevailing rate. Hence, wage rates fall very slowly.

Furthermore, if the economy is booming, employers will bid more vigorously for workers—which means that the demand for labor is increasing at a fast pace than they would if the demand for labor were either not increasing or only increasing at a slow rate.

Wages and salaries are essential input costs for firms. Therefore, rising wages should lead to higher prices for products and services in an economy. Hence, pushing the overall inflation rate higher. Thus, instead of wage inflation, Phillips graphed the relationship between general price inflation and unemployment.

Figure 10.2 Phillips Curve

Because of the popularity of the application of Phillip's curve, many economists use the latter to fine-tune the monetary or fiscal policy. However, a group of monetarists led by Milton Friedman and Edmund Phelps argued that the Phillips Curve does not apply over the long term. Over the long run, the economy tends to revert to the natural rate of unemployment it adjusts to any rate of inflation. If workers expect prices to increase, they will demand higher wages so that their real wages are constant. In cases where monetary or fiscal policies are adopted to lower unemployment below the natural rate, the increase in demand, as a result, will encourage firms to increase prices even faster.

As inflation increases, workers may supply labor in the short run because of higher wages, leading to a decline in the unemployment rate. Conversely, when workers are fully aware of the loss of their purchasing, in the long run, their willingness to supply labor diminishes, leading to the rise of the unemployment rate to the natural rate. Still, wage inflation and general price inflation continue to increase.

They contend that higher inflation would not benefit the economy through a lower rate of unemployment over the long-term. A lower rate of inflation should not inflict a cost on the economy through a higher rate of unemployment. Since inflation has no impact on the unemployment rate in the long term, the long-run Phillips curve morphs into a vertical line at the natural rate of unemployment.

ACTIVITY

1. A presidential aspirant is campaigning to raise unemployment compensation benefits and lower the unemployment rate. Comment on the compatibility of these goals.

2. Government officials find it useful to measure the nation's "economic health." The unemployment rate is currently used as a major indicator of the relative strength of labor supply and demand. Do you think the unemployment rate is a useful indicator of labor market tightness? Why?

3. Recent empirical evidence suggests that unemployed workers' reservation wages decline as their spells of unemployment lengthen. That is, the longer they are unemployed, the lower their reservation wages become. Explain why this might be true.
4. The "employment-at-will" doctrine allows employers to discharge workers for any reason whatsoever. This doctrine has generally prevailed in the United States except modified by union agreements or by laws preventing discrimination. The Philippine law has long ago eroded the employment-at-will doctrine by moving closer to the notion that one's job becomes a property right that the worker cannot be deprived of unless there is a compelling reason. If employers lose the right to discharge workers without "cause," what effects will this have on the unemployment rate?

5. Explain the following statements:

a. Importance of wage and inflation.

b. The Phillips curve gives the relationship between the country's inflation rate and its unemployment rate at a given set of inflationary expectations.

c. Why do policymakers use the Phillips Curve effect to fight unemployment?

d. The natural rate of unemployment concerning the effect of Phillip's curve.

VALUES INTEGRATION

Activity 1

Create a case study in any of the following topics:

- Increasing the minimum wage to amount equal to the living wage in the Philippines
- Causes of Learning Poverty in the Philippines despite the increase in Annual Government Budget to Education
- Amendments to P.D. 442 – Labor Code of the Philippines

Format and Style

Essays must be at least 15 pages but not more than 40, including footnotes.

For the body of the essay, students must use Times New Roman font, 12-point, 1.5-spaced.

For the footnotes of the essay, students must use Times New Roman font, 10-point single-spaced. If you have questions on the proper usage of footnotes, please consult the “Oxford University Standard for Citation of Legal Authorities (OSCOLA)”.

Character spacing must be set to normal with 1-inch (2.54 cm) margins all around.

All essays must be on letter-size paper (8.5 x 11 inches/21.59 x 27.94 cm).

The essay has to be a legal document and must contain extensive research and legal analysis; therefore, it will include substantial foot pages and citations.

Essays should be submitted in Word format.

As the final output, students should compile all qualified essays into a book. They should be responsible for the book design and printing of the material.

Scoring Rubric

Criteria	Points
Relevance to the topic	20 points
Extensive discussion	60 points
Style, spelling, format, and grammar	20 points
Total	**100 points**

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